TREATING HIV/AIDS

A QUICK REFERENCE GUIDE

Treating HIV/AIDS: A Quick Reference Guide is a summary and synopsis of the American Psychiatric Association's *Practice Guideline for the Treatment of Patients With HIV/AIDS,* which was originally published in *The American Journal of Psychiatry* in November 2000 and is available through American Psychiatric Publishing, Inc. The Quick Reference Guide is not designed to stand on its own and should be used in conjunction with the full text of the Practice Guideline. Graphical algorithms illustrating the treatment of HIV/AIDS are included.

STATEMENT OF INTENT

The Practice Guideline is not intended to be construed or to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns evolve. These parameters of practice should be considered guidelines only. Adherence to them will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgment regarding a particular clinical procedure or treatment plan must be made by the psychiatrist in light of the clinical data presented by the patient and the diagnostic and treatment options available.

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OUTLINE

A. General Information on HIV/AIDS

1. Epidemiology
2. Transmission of HIV
3. Pathogenesis of HIV
4. Antiretroviral Treatment

A. General Information on HIV/AIDS

1. Epidemiology

- **Current U.S. information** is available at http://www.cdc.gov/hiv/dhap.htm.
- Since 1995, there has been a **large decline in death rates** because of **antiretroviral therapy.**
- The **overall prevalence of HIV/AIDS has increased** because of decline in death rates plus the steady rate of new HIV infection; **prevention of infection remains a high priority.**

A. General Information on HIV/AIDS

2. Transmission of HIV

Routes of transmission

Sexual: Unprotected intercourse is the most common route of transmission, irrespective of gender or sexual orientation (see Table 2 of *Practice Guideline for the Treatment of Patients With HIV/AIDS* for risks).

Injection drug use: Sharing unsterilized injection equipment is a very efficient means of transmitting HIV.

Perinatal: Infection from mother to infant can occur during gestation, delivery, or breast-feeding.

Blood transfusion: In the U.S., screening blood for HIV has reduced the risk by transfusion to almost zero.

Cofactors that enhance transmission

Physical: The presence of sexually transmitted diseases may cause genital lesions or genital/mucous membrane bleeding during sexual activity.

Behavioral: Substance use lowers sexual inhibitions, impairs judgment, and increases impulsivity.

A. General Information on HIV/AIDS

3. Pathogenesis of HIV

- During the **acute phase,** 50%–90% of people experience a flu-like syndrome within 3–6 weeks of infection.
- The **clinically asymptomatic phase** may last for many years. The host seroconverts. The immune system may appear to control infection, but chronic viral replication persists.
- **AIDS** is defined by conditions indicating significant immunosuppression (e.g., opportunistic infections) or other conditions (dementia, wasting). See Tables 3 and 4 of *Practice Guideline for the Treatment of Patients With HIV/AIDS* for criteria.

A. General Information on HIV/AIDS

4. Antiretroviral Treatment

- For **guidelines on the use of antiretroviral agents,** go to http://www.hivatis.org.
- The **goal of antiretroviral treatment** is to reduce viral load to undetectable levels and maintain this without interruption.
- **Lack of clinical response** may be due to problems with adherence, sub-optimal antiretroviral treatment potency, and genetic mutation of strains.
- **Adverse effects of antiretroviral treatment** include lipodystrophy (fat redistribution syndromes); hyperlipidemia; nephrotoxicity; bone marrow suppression; neuropathy; and elevation of glucose levels possibly causing diabetes mellitus, nausea, diarrhea, sleep disturbances, and rash.
- **Combined cost for antiretroviral agents** in multidrug regimens is very expensive.
- **Adherence is of utmost concern with antiretroviral treatment.** Even minor deviations from the prescribed regimen can result in viral resistance and permanent loss of efficacy. Studies of antiretroviral treatment continue to indicate that near-perfect adherence is needed to adequately repress viral replication.

B. Management of Individuals at High Risk

1. Assessment
2. HIV Antibody Testing
3. Risk Reduction Strategies
4. Postexposure Prophylaxis
5. Special Populations of Patients

B. Management of Individuals at High Risk

1. Assessment

Obtain risk history.

- Risk history should be **considered in every psychiatric evaluation** to identify individuals at high risk.
- An **ongoing appraisal of risk** is sometimes needed (e.g., during acute episodes of psychiatric illness, stressful or traumatic life events, and initiation of sexual activity in adolescents).
- **Assess sexual history with nonjudgmental attitude** (see Table 2 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS* for risks associated with specific behaviors).
- See Table 12 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS* for risk assessment questions.

Conform to the vocabulary and cultural beliefs of the patient.

See http://www.drugabuse.gov for current list of drug terminology.

B. Management of Individuals at High Risk

2. HIV Antibody Testing

Identify infection early.

- **Early identification of HIV infection is important** so that newly infected persons can be medically monitored and promptly receive antiretroviral treatment as appropriate.
- **Risks** of testing include worries, fears, and stigma associated with a diagnosis of HIV/AIDS.

Provide pre- and posttest counseling.

- Explain the HIV test, including risks and benefits.
- Discuss the confidentiality of results.
- Review risk behaviors and present risk reduction strategies.
- Discuss plans for dealing with a positive or negative result.

CDC guidelines for counseling are available at http://www.cdc.gov/hiv/pubs.htm.

Discuss with patient issues surrounding disclosure of status to family, friends, or employers.

The American College of Obstetricians and Gynecologists recommends that an HIV antibody test be offered during annual examinations to all women seeking preconception care.

B. Management of Individuals at High Risk

3. Risk Reduction Strategies

Provide education about behaviors that place patients at risk for HIV infection.

Manage risk behaviors.

- Active discussions foster changes in behavior.
- Ongoing discussions about motivation and skills are needed to ensure consistent changes.
- Problems or disorders that may promote risky behavior include impulse control disorders, untreated depression, hypersexuality associated with mania, psychotic disorders, mental disorders due to a general medical condition, binge alcohol or drug use, and personality disorders.
- Provide extended counseling and case management.

Implement specific risk reduction programs (e.g., needle-exchange programs, skills training groups).

Develop skills to discuss and negotiate safer sex with partners (e.g., practice communication skills through role-play).

Evaluate access to condoms and skills to use them.

See Table 13 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS* for guidelines on condom use.

B. Management of Individuals at High Risk

4. Postexposure Prophylaxis (PEP)

- **PEP may prevent initial cellular infection** and local propagation of HIV.
- PEP is **currently recommended for known occupational exposure,** especially percutaneous or mucous membrane exposure to blood or other bodily fluids. Its value in other exposure situations (e.g., known sexual exposure) is being studied.
- **Rapid assessment is essential.** A multiple-drug regimen must begin as soon as 1–2 hours and no later than 24–36 hours after exposure. The regimen must continue for at least 4 weeks.
- Additional information is available through the National Clinicians' Post-Exposure Prophylaxis Hotline (888-448-4911) and web site (http://pepline.ucsf.edu/pepline).

B. Management of Individuals at High Risk

5. Special Populations of Patients

Patients with severe mental disorders

- HIV infection may be associated with health risks caused by poor access to health care or decreased capacity for self-care.
- Risk reduction programs tailored to the needs of special populations have been shown to reduce risk of HIV infection.

Patients with substance use disorders

- For patients injecting drugs, risk reduction strategies include methadone or LAAM maintenance treatment, needle-use education and bleach distribution, drug rehabilitation programs, safer-sex education, legal clean-needle purchase, and needle-exchange programs.
- For noninjection drugs and alcohol, treatment may reduce risk exposure secondary to disinhibition or cognitive impairment.

Victims of sexual abuse/crimes

- Ask about specific behaviors that are associated with risk for HIV transmission.
- Determine if a psychiatric disorder is present and whether treatment is indicated.
- Consider postexposure prophylaxis in cases of sexual assault.

C. Psychiatric Management of Individuals With HIV/AIDS

1. Assessment

2. Management Principles

C. Psychiatric Management of Individuals With HIV/AIDS

1. Assessment

- **Obtain risk history; determine HIV status.**
- **Conduct comprehensive diagnostic evaluation.**
  Because of the stress associated with HIV diagnosis, special attention should be paid to assessing suicidal ideation, self-destructive behavior, and enormous anger.
- **Assess possible medical causes of new-onset symptoms and initiate specific treatment interventions.**
- **Understand psychodynamic issues.**
- **Include HIV risk assessment and prevention in treatment plan for every patient with severe mental illness and/or an alcohol or substance use disorder.**

C. Psychiatric Management of Individuals With HIV/AIDS

2. Management Principles

Establish and maintain a therapeutic alliance.

- Recognize a patient's understanding of stage of illness and evaluate coping mechanisms.
- Explore cultural/ethnic beliefs regarding psychiatric and HIV illness and conform to language of the patient.
- Review issues of confidentiality. The patient should be asked to consider the psychiatrist's role in assisting in the process of disclosure of HIV status to appropriate persons.
- Be aware of transference and countertransference feelings, including personal attitudes about HIV infection and how the patient acquired it.

Coordinate care with other mental health and medical providers.

- It is essential to collaborate with other physicians in infectious disease, primary care, and other disciplines to keep up-to-date – e.g., through discussions of drug interactions and close monitoring and workup of unexplained or psychiatric symptoms.
- Patients need to provide their agreement for the exchange of specific information with other care providers.

Diagnose and treat all associated psychiatric disorders.

- Actively monitor for substance abuse because it is often associated with risk behaviors.
- Do not assume that patients who have relatively good immune functioning have no risk for central nervous system HIV disorders.
- Psychotherapeutic management of patients with HIV infection is similar to that of other patients.

C. Psychiatric Management of Individuals With HIV/AIDS

2. Management Principles *(continued)*

Facilitate adherence to overall treatment plan.

- See Table 17 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS* for strategies to increase adherence.
- Poor adherence to antiretroviral medications results in development of viral resistance.
- Comorbid psychiatric disorders (e.g., substance abuse or depression) can adversely affect compliance; adherence to both psychotropic and HIV medications is important.
- Psychoeducational approaches can reinforce the importance of adherence, encourage appropriate help seeking from others, and identify barriers to adherence.
- Intensive psychodynamic psychotherapy may be helpful if still unable to modify behavior after educational approaches.
- Outreach efforts with public health nurses and services can provide adherence assistance for hard-to-reach patients.

Provide risk reduction strategies to minimize the spread of HIV.

- Risk reduction is an ongoing treatment priority.
- Risk assessment should be repeated when there are changes in the clinical status or social situation.
- Patients on high-dose antiretroviral medications should be advised that they remain contagious.

Explore the role of religion and spirituality.

- Assess social supports.
- Utilize appropriate community-based services.
- Resolve financial and legal concerns.

Maximize psychological and social/adaptive functioning.

- Prepare for issues of disability, dying, and death.
- Advise significant others and family regarding sources of care and support.
- Assist with significant intrapersonal, interpersonal, and social stresses.

D. Management of HIV-Related Neuropsychiatric Symptoms

1. Assessment
   a. Differential Diagnosis
   b. Workup of Acute Changes in Mental Status
   c. Assessment of Cognitive Symptoms
2. Treatment

D. Management of HIV-Related Neuropsychiatric Symptoms

1. a. Differential Diagnosis

Delirium

- Consider **first** before other diagnoses.
- Common in HIV infection.
- Most common causes: iatrogenic and psychoactive-substance–induced toxicity, infection, neoplasms, metabolic disturbances, some antiretroviral medications (e.g., zidovudine at high doses).

Other HIV-associated cognitive dysfunction

HIV-associated dementia (HAD)

- Subcortical dementia.
- Clinical triad of progressive cognitive decline, motor dysfunction, and behavioral abnormalities.
- Common symptoms: psychomotor slowing, decreased speed of information processing, impaired verbal memory and learning efficiency, impairment in executive functioning.

HIV-associated minor cognitive motor disorder (MCMD)

- Less severe than HAD.
- Important to diagnose and treat because it involves dysfunction rather than cell death.
- May affect spinal column (e.g., vascular myelopathy of dorsolateral columns) and/or peripheral nerves (e.g., painful sensory neuropathy).

HIV-associated progressive encephalopathy (PE) or HIV encephalopathy in children (term used as opposed to dementia caused by HIV)

- Characterized by a triad of symptoms: impaired brain growth, progressive motor dysfunction, and loss or plateau of developmental milestones.
- Markers of immunological functioning (e.g., CD4 count) do not correlate with degree of neurocognitive impairment.
- Some cognitive and language delays (e.g., receptive and expressive language and visual-motor deficits) even when appearing asymptomatic.
- Distinguish from mental retardation secondary to other causes, such as maternal drug addiction and prematurity, which can be determined only by longitudinal assessment.

1. a. Differential Diagnosis *(continued)*

Mental disorders caused by general medical conditions affecting the central nervous system

May present with psychiatric symptoms or syndromes such as psychosis or mood disorder (see Table 9 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS* for list of conditions).

Medication-induced mental disorders

Medications commonly used to treat conditions assoc

D. Management of HIV-Related Neuropsychiatric Symptoms

1. b. Workup of Acute Changes in Mental Status

Rule out treatable and reversible causes – especially medical causes of CD4 count drop or viral load rise. Note that acute changes in mental status may *not* correlate with changes in CD4 counts or viral load and may be due to other causes.

Workup for patients with or at high risk for HIV infection who present with acute onset with no previous psychiatric history (see Table 11 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS*:

- Complete medical evaluation including assessment of oxygen saturation of blood
- Toxicology screen
- Thorough neurological examination
- Laboratory evaluations (including assessment of immune function and viral load)
- Brain imaging studies
- Comprehensive assessment for infectious processes, possibly lumbar puncture

D. Management of HIV-Related Neuropsychiatric Symptoms

1. c. Assessment of Cognitive Symptoms

- Requires a **comprehensive psychiatric assessment, formulation of a differential diagnosis,** and **possible medical workup.**
- **Subcortical involvement –** early cognitive changes differ from symptoms associated with cortical dementia; more commonly presents with psychomotor slowing, short-term memory dysfunction, or attention deficits rather than deficits in language or visual recognition.
- **MMSE is not sensitive in picking up early HIV-associated cognitive-motor symptoms** (see Table 14 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS* for a list of sensitive screening examinations).
- **Self-assessment is not reliable.**
- **Baseline screening examination should be done on every patient** with HIV.
- **Readminister on a regular basis.**
- **Formal neuropsychological testing is helpful to fully document dysfunction and identify areas of relative strength** when there is evidence of impairment.
- Once identified, **collaborate with other clinicians regarding further medical care.**

D. Management of HIV-Related Neuropsychiatric Symptoms

2. Treatment

Delirium

- **Treat delirium per APA's *Practice Guideline for the Treatment of Patients With Delirium.*** Intervention should correct underlying causes (see Table 8 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS*).

Dementia

- Use **potent antiretroviral therapy** to target the underlying HIV infection.
- Use **psychotropic medication** for comorbid conditions such as depression.
- Consider **antipsychotic** or **stimulant agents** for symptomatic management of HIV-associated dementia (e.g., agitation or fatigue).
- **Psychotherapy may be helpful with mild to moderate dementia** to help patients understand, mourn, and adapt to this new impairment of functioning.

E. Management of Other Disorders

1. General Treatment Guidelines
2. Psychiatric Disorders
3. HIV-Associated Syndromes With Psychiatric Implications

E. Management of Other Disorders

1. General Treatment Guidelines

Provide psychotherapy.
Psychotherapeutic management of patients with HIV infection should follow the same general principles used with other patients.

Provide pharmacotherapy.

For all HIV-infected patients:

- Follow similar principles as for geriatric patients or patients with comorbid medical illnesses.
- Be aware that some medications for HIV can potently inhibit or induce the cytochrome P450 (CYP450) system (see Table 15 of APA's *Practice Guideline for the Treatment of Patients With HIV/AIDS*).
- Judiciously use psychotropics that share metabolic pathways.

Particularly for patients with symptomatic HIV disease:

- Use lower starting doses and slower titration.
- Provide the least complicated dosing schedules possible.
- Focus on drug side effect profiles to avoid unnecessary adverse effects (e.g., anticholinergic effects from tricyclic antidepressants, leukopenia from carbamazepine).
- Maintain awareness of drug metabolism/clearance pathways and possible end organ effects to minimize drug-drug interactions.
- Collaborate with primary HIV provider to ensure that all medications prescribed are compatible.

E. Management of Other Disorders

2. Psychiatric Disorders

Mood disorders

- Management of mood disorders is similar to that for other patients with mood disorders with medical comorbidity.
- Fatigue and insomnia may be symptomatic of the mood disorder, especially in medically asymptomatic patients.
- The overall medical status of the patient should be assessed to take into account possible effects of concurrent illness or side effects of medication.
- Choice (and dosage) of antidepressant or mood-stabilizing agent may be influenced by the antiretroviral regimen.

Substance use disorders

- Substance use disorders should be treated (e.g., with a drug rehabilitation program) to help prevent further infection of others by reducing risk behavior.
- During treatment of opiate dependence with methadone or LAAM, doses may need to be increased or decreased in accordance with the use of specific antiretroviral agents.

Anxiety disorders

- Psychotherapeutic approaches to situational anxiety can help patients work through intense affects.
- Standard pharmacologic treatments for anxiety disorders should be used with caution (e.g., many benzodiazepines should be used very cautiously when patients are taking protease inhibitors, particularly ritonavir, because benzodiazepine blood levels may be greatly elevated).

E. Management of Other Disorders

2. Psychiatric Disorders *(continued)*

Psychotic disorders

- Psychotic symptomatology may arise from opportunistic infections, mania, HIV-associated dementia, or delirium.
- Evaluation of new-onset psychosis requires a careful medical/neurological workup.
- Beware of drug-drug interactions and overlapping toxicities (e.g., ritonavir may elevate levels of clozapine, clozapine and zidovudine both cause bone marrow suppression).
- Atypical neuroleptics are first-line treatments in late-stage HIV infection because of lower incidence of extrapyramidal side effects.
- Lower doses of atypical antipsychotics tend to be sufficient.

Adjustment disorders

- Various forms of psychotherapy may be indicated to prevent progression to a more severe psychiatric disturbance.

Sleep disorders

- May be secondary to a psychiatric disorder such as depression.
- May be a manifestation of HIV infection in the brain.
- May be secondary to complications of HIV infection (e.g., pain); medical intervention may improve sleep.
- Efavirenz (an antiretroviral) is associated with a high incidence of vivid dreams and nightmares.

Disorders of infancy, childhood, and adolescence

- Psychiatric disorders are common among infected youth, with rates of about 30% for mood disorders and 25% for attention deficit hyperactivity disorder.
- Psychotherapy may be of particular help for adolescents who are struggling with emerging sexuality.
- Substance abuse is frequent and likely to involve multiple drugs.
- Issues of risk behavior and autonomy have implications for HIV prevention, adherence to treatment, and effective coping with chronic illness.

E. Management of Other Disorders

3. HIV-Associated Syndromes With Psychiatric Implications

- **Somatic symptoms at the interface of medical and psychiatric disorders** include fatigue, weight loss, pain, and sexual dysfunction. Psychiatrists can integrate treatment approaches and promote interdisciplinary and interspecialty dialogue; avoid all-or-nothing, mind-or-body approaches.
- **Wasting syndrome** generally occurs in patients with more advanced HIV illness and can be related to a number of physiologic disturbances such as progressive HIV disease, hypogonadism, and gastrointestinal malabsorption.
- **Chronic fatigue** is frequently associated with depressed mood and physical disability.
- **Common painful symptoms** include headaches, herpetic lesions, peripheral neuropathy, back pain, throat pain, arthralgias, and muscle and abdominal pain.
- **Sexual dysfunction** has been reported to occur in both men and women with HIV infection. In both men and women, hypogonadism can be treated with testosterone replacement with physiologic dosing.