

A Biopsychosocial Approach to HIV/AIDS Education for Psychiatry Residents

Mary Ann Cohen, M.D.

Marshall Forstein, M.D.

Relevance of HIV/AIDS Education for Psychiatry Residents

AIDS psychiatry has been described as a paradigm for teaching psychosomatic medicine with a biopsychosocial approach (1–7). The need for HIV/AIDS education has been emphasized in descriptions, studies, and surveys of psychiatric residency training programs (3–6). HIV/AIDS psychiatry provides opportunities for psychiatry residents to learn about preventing illness and managing chronic and acute illness in persons with psychiatric disorders. It magnifies the significance of assessing acute mental status changes in medically ill persons, discussing sexual and drug-use behaviors, and integrating a cognitive assessment into every psychiatric consultation. The complexities of AIDS and its treatments also magnify the complicated interactions of medications as influenced by mechanisms of drug metabolism and the necessity for building rapport to facilitate the recognition and management of psychiatric symptoms and disorders that affect adherence to medication and participation in treatment. HIV/AIDS complexities also substantiate the value of integrating palliative approaches to care throughout the course of illness, not only at the end of life.

AIDS is similar to most other complex and severe medical illnesses, such as cancer, cardiovascular illnesses diabetes mellitus, emphysema, and systemic lupus erythematosus. Severe, complex illnesses have a profound impact on the lives of individuals, their loved ones, and families. Nonadherence to medical care heightens suffering, morbidity, and mortality. Most persons with severe, complex illnesses can benefit from a comprehensive, compassionate, biopsychosocial approach

to care. Integrating medical and psychiatric care for persons with HIV and AIDS can improve adherence, ameliorate suffering, and decrease morbidity and mortality. AIDS differs from many other complex and severe illnesses because it leads to other multi-morbid and debilitating medical illnesses, such as endocrine, hematologic, renal, pulmonary, neoplastic, and cardiac illness, as well as concomitant illnesses, such as hepatitis C (HCV). AIDS is also associated with specific psychiatric disorders, such as mood disorders, anxiety disorders, psychosis, and HIV-associated neurocognitive disorders (HAND). AIDS differs from many complex and severe illnesses in two ways that are very relevant to HIV/AIDS education. The first is that it is an unusual illness because it is almost entirely preventable, and adherence to risk-reduction behaviors has public health implications. The second is that HIV and AIDS are associated with sex, drug use, and AIDS-associated stigma and discrimination, or AIDSism (8).

Whereas nonadherence to prevention and treatment of all illnesses has tragic consequences to patients, families, and loved ones, nonadherence to prevention and treatment of HIV and AIDS also results in HIV transmission and has significant public health implications. The most significant challenges to AIDS education in psychiatric residency training include illness-related and training-related factors. Illness-related challenges include an illness with rapidly-changing prevalence, incidence, and treatments, as well as stigma and AIDSism. Training-related factors include pressures of time and productivity, as well as complacency and denial regarding HIV and AIDS. During 4 years of training, psychiatry residents rotate through the inpatient and outpatient units of psychiatry and general care, the emergency room, and intensive care units. Each of these settings provides an opportunity for HIV training. In this article, we document the relevance of AIDS education for psychiatry residents and describe an HIV and AIDS curriculum

Received February 11, 2012; accepted April 19, 2012. From the Dept. of Psychiatry, Mount Sinai Medical School, New York, NY, Dept. of Psychiatry, Harvard Medical School, Boston, MA. Send correspondence to Mary Ann Cohen, M.D., e-mail: macohen@nyc.rr.com

Copyright © 2012 Academic Psychiatry

that can be incorporated into 4 years of psychiatric residency to meet these challenges with a systematic and dynamic biopsychosocial approach.

HIV and AIDS Curriculum for Psychiatry Residents

AIDS psychiatrists, psychosomatic medicine psychiatrists, as well as child, adolescent, adult, addiction, forensic, and geriatric psychiatrists are uniquely poised to intervene and provide both preventive and treatment interventions for children, adolescents, adults, and elderly persons who are vulnerable to, infected with, or affected by HIV infection. The importance and relevance for introducing psychiatric residents to an HIV curriculum that is incorporated into each of their rotations and to each of their assigned settings cannot be overemphasized. HIV can be incorporated into both the orientation and supervision of every psychiatric resident rotation and assignment, including inpatient, outpatient, emergency room, child and adolescent psychiatry, geriatric psychiatry, forensic psychiatry, and day treatment.

Development of an HIV curriculum can be a joint educational collaboration between the HIV clinicians and HIV psychiatrists.

In order to facilitate faculty development and curriculum implementation, a written HIV curriculum can be distributed to both residents and supervisors before the beginning of each academic year. Given the rapidity of changes in the field and in clinical practice, the curriculum needs to be reviewed and updated annually.

The prevalence and incidence of HIV and AIDS are high in some areas of the United States (9) and worldwide (10). In some states, the prevalence rates range from 53 to 1,953 persons with HIV per 100,000 (11). Persons with severe mental illness have a high prevalence of risky behaviors, but may lack access to adequate medical care and access to HIV testing. Since early diagnosis and medical intervention are vital for health and survival (11), it is important to encourage persons with severe mental illness to get tested for HIV infection. Psychiatric facilities are ideal settings for education for prevention and risk-reduction, initiation of HIV testing and counseling, and introduction into HIV care for persons whose test results indicate HIV infection. Persons with HIV and AIDS who have multi-morbid medical and psychiatric disorders often lack access to medical care until their psychiatric disorders are treated.

Curriculum Modalities and Implementation

The curriculum is best taught through direct clinical experience and will vary depending on the medical school,

hospital, and setting. Case-based tutorials are recommended. Faculty development can help to provide a seamless and comprehensive approach to HIV psychiatry that will help to provide role models as well as a reciprocal teaching-learning experience. In low-endemic areas, HIV psychiatrists can be accessed by consulting literature as well as through the APA Office of HIV Psychiatry. Ideally, teaching can take place on all resident rotations, such as on inpatient psychiatry units, forensic psychiatry, adolescent psychiatry, addiction, and geriatric psychiatry. Rotations on HIV psychiatry in a co-located AIDS clinic setting, with follow-up of patients on general-care admissions or in psychiatry serve as an excellent learning experience, if available. Electives in high-endemic areas can substitute for such experience.

Incorporating new areas of learning into psychiatric residency training can be complex, given the high standards, to ensure that residents are competent to practice based on the training as governed by the Common and Specific Program Requirements of the Residency Review Committee. Programs vary in the amount of time that can be devoted to HIV psychiatry. Training programs may approach integrating HIV teaching in a variety of ways. Both didactic seminars and clinical experience will vary, based on the variable epidemiology of HIV in the populations within the purview of the clinical site. High-endemic areas provide many opportunities to develop HIV training, and supervisors and service directors may be more knowledgeable and comfortable with caring for HIV-infected patients. Low-endemic areas may focus learning about HIV more in didactics, research seminars, journal club, and grand rounds. Where there are no local psychiatrists trained in HIV, technology through telemedicine may provide resources otherwise not available. Although many programs provide lectures on HIV psychiatry, we propose a more comprehensive approach throughout the residency, including topics on each of the rotations relevant to the clinical setting. The APA Office of HIV Psychiatry provides speakers, a curriculum, and PowerPoint slide sets, available at www.psych.org/Resources/OfficeofHIVPsychiatry.aspx.

The curriculum we propose is based on the care setting. Each of the rotations will need a corresponding HIV and AIDS curriculum. Basic information about HIV can be introduced in seminar or lecture format as the introduction to HIV and AIDS, preferably by the AIDS psychiatry or psychosomatic medicine faculty.

We propose an outline of the content that should be included in every residency program (see Table 1).

Basic Medical Aspects of HIV and AIDS

Note that prevalence and incidence rates are estimates, and change over time, needing to be updated annually (9–12). June 5th, 2011, marked the end of three decades since the first article was published by the Centers for Disease Control and Prevention (CDC) describing a cluster of patients with a new, complex, infectious disease associated with immune deficiency (13). On June 3, 2011, the CDC reported that since 2008, an estimated 1,178,350 persons are living with HIV in the United States, including 236,400 (20.1%) whose infection was undiagnosed (9). Worldwide, 33,200,000 persons are living with HIV, and 2,600,000 persons each year are newly infected with HIV (10). Unsafe exposure of mucosal surfaces to the virus accounts for 80% of new infections (10). Percutaneous or intravenous inoculations of virus account for 20% of new infections (10).

Psychiatric Aspects of HIV and AIDS

Psychiatrists are in a unique position to prevent HIV transmission. Psychiatrists often have long-term relationships

with their patients. They routinely make comprehensive assessments of substance abuse and dependence, as well as sexual history and behaviors. Psychiatrists routinely incorporate cognitive assessments into psychiatric evaluations. Routine evaluations also include assessment for suicidal ideation, history, attempts, and plans. Psychiatrists assess for and clarify psychodynamics that lead to risky behaviors, readiness for behavior change, and timing for the encouragement of behavior change. Integrated into psychiatric care are many important aspects of HIV-prevention, including encouragement of behavior change, empowerment of patients to protect themselves from destructive relationships, resolution of conflicts that may lead to self-destructive behaviors, and enhancement of self-esteem, self-worth, and self-care.

Psychiatric disorders serve as both vectors of HIV and barriers to adherence to risk-reduction and care. Post-traumatic stress disorder (PTSD) may lead to problems with caring for self and body, unsafe sex, and a sense of a foreshortened future; psychosis and cognitive disorders can lead to disinhibition and regression; mania, to disinhibition and

TABLE 1. Outline of Content Areas of HIV/AIDS Education for Psychiatry Residents

<ol style="list-style-type: none"> 1. Basic Medical Aspects of HIV <ol style="list-style-type: none"> a. Epidemiology b. Virology, CD4, viral load c. Transmission d. Immunology e. Medical and psychiatric illnesses related to HIV infection f. Multi-morbid medical and psychiatric illnesses unrelated to HIV infection but associated with and prevalent in persons with HIV and AIDS 2. Education About Prevention of HIV Transmission and Risk-Reduction in Psychiatric Settings 3. Psychiatric Assessment <ol style="list-style-type: none"> A. Establish rapport and set a non-judgmental tone B. Comprehensive assessment with special focus on sexual history, drug history, trauma history, and suicidality C. Comprehensive psychiatric examination for symptoms and signs of <ol style="list-style-type: none"> a) Mood disorders b) Anxiety disorders, especially PTSD c) Substance use disorders d) Cognitive disorders 4. Differential Diagnosis <ol style="list-style-type: none"> a. Psychiatric b. Medical <ol style="list-style-type: none"> a) HIV-related infections, cancers, neuropathies, myopathies, endocrinopathies, nephropathy, pancreatitis, hematologic illness b) Non-HIV-related cardiovascular illness, cancers, endocrinopathies c) ARV and other medication-related illnesses, such as IRIS, lipodystrophy, lactic acidosis, and metabolic disorders c. Psychosocial issues 5. Treatment of HIV/AIDS <ol style="list-style-type: none"> A. Role of the psychiatrist as collaborator and member of a multidisciplinary team B. HIV psychopharmacology, ARVs, and drug-drug interactions C. Psychotherapeutic approaches to care D. Psychosocial aspects of care E. Palliative care F. End-of-life care

hypersexuality; depression, to feelings of low-self esteem and problems with caring for the self. Of great concern are the substance-use disorders that directly contribute to HIV through sharing of needles and drug paraphernalia, exchange of sex for drugs, and unsafe partner-choice and sexual behaviors.

Persons with treated, severe mental illness have a three- to fourfold higher HIV prevalence than the general population, and it is estimated that persons with untreated severe mental illness may have 10 to 20 times higher HIV prevalence (14).

HIV/AIDS psychiatry is relevant to psychiatric training through the life-cycle. Early childhood and adolescence are complicated by issues of disclosure. There is a need for sensitivity to both the timing of disclosure and the communication about HIV. When to disclose to a child that he or she is infected and when and how to disclose parental infection can create crises and pose challenges. Transitioning from childhood to adolescence and adolescence to adulthood may lead to concerns about both becoming sexually active as well as adherence to risk-reduction and care.

The adult years and complexities of partnerships bring more challenges (sero-concordant couples, disclosure issues, family planning, pregnancy, and nursing as well as permanency planning) for persons with HIV and AIDS and their families. Later years with HIV and AIDS are fraught with concerns that involve HIV-prevention, as well as the importance of early intervention and treatment.

Education About Prevention of HIV Infection in Emergency Room, Day Treatment, Outpatient, Geriatric, Adolescent, and Inpatient Psychiatry Settings

A psychiatric crisis or emergency offers a special opportunity to ask about risk-behaviors and to offer substance-use interventions and HIV testing and counseling to persons at risk for HIV infection or for persons who are unaware of being infected with HIV and who could benefit from early medical intervention and treatment with ARVs. Not only is it important to diagnose and intervene early for the sake of the patient, it is also important for prevention of HIV transmission, since it is during the time of acute HIV infection that there is a high rate of viral transmission. This is thought to be the result of the lack of early immune response in the person recently exposed to HIV (15). Hence, early intervention is beneficial to both the exposed and infected individual and his or her contacts, and has significant public health benefits. Interventions include education about risk-behaviors and risk-reduction,

offering confidential HIV testing and counseling, education about condom use as well as condom availability, referrals for alcohol or other drug detoxification or treatment, and early recognition of acute HIV infection for early intervention (15). Early recognition of HIV or AIDS exposure can lead to mitigation of illness and prevention of illness progression and transmission (15).

Psychiatric Assessment of Persons With HIV and AIDS

The comprehensive, compassionate, and nonjudgmental approach to the care of persons at risk for or infected with HIV begins with a thorough psychiatric evaluation. This evaluation has been described (16) and is designed with an ego-supportive approach that enables the psychiatry resident to provide consultants with a sensitive and comprehensive assessment that can be integrated into patient care. Comprehensive psychiatric evaluations can provide diagnoses; inform treatment; and mitigate anguish, distress, depression, anxiety, and substance use in persons with HIV and AIDS. Furthermore, thorough and comprehensive assessment is crucial because HIV has an affinity for brain and neural tissue and can cause central nervous system (CNS) complications, such as HIV-associated neurocognitive disorders (HAND), even in otherwise-healthy, seropositive individuals. Some persons with HIV and AIDS have no psychiatric disorder, whereas others have a multiplicity of complex psychiatric disorders that are responses to illness or treatments or are associated with HIV/AIDS (such as HAND) or multi-morbid medical illnesses and treatments (such as hepatitis C, cirrhosis, end-stage liver disease, HIV nephropathy, end-stage renal disease, anemia, coronary artery disease, and cancer). Treatment for hepatitis C with Interferon/ribavirin may be associated with depression, psychosis, and suicide. Treatment with anti-retrovirals (ARVs) may result in many serious complications, such as immune reconstitution inflammatory syndrome (IRIS) when an effective ARV regimen is started or restarted. ARVs can also lead to disfiguring and devastating lipodystrophy, with severe facial atrophy and “protease paunch” serving as unwanted outward markers of HIV infection. Persons with HIV and AIDS may also have multi-morbid psychiatric disorders that are co-occurring and may be unrelated to HIV (such as PTSD, schizophrenia, and bipolar disorder). The complexity of AIDS psychiatric consultation is illustrated in an article (17) titled “Depression, HIV Dementia, Delirium, Posttraumatic Stress Disorder (or All of the Above).” Persons with HIV

and AIDS have a high prevalence of distress (18) and are also vulnerable to suicidal ideation, attempts, and suicide (19).

A brief summary of a comprehensive HIV psychiatric assessment presents only salient and relevant features. There is no shortcut for this assessment, which takes at least 90 minutes and should be done on initial evaluation and on an annual basis or when new signs or symptoms occur. The reader is referred to the original citation (16) for a description of the complete psychiatric consultation developed for both HIV prevention and also for persons with HIV/AIDS.

Introduction, Chief Complaint, and History of Present Illness Setting the tone and demonstrating compassion and respect should include shaking hands. Shaking hands, while important with all initial patient encounters, takes on special relevance in the context of AIDSism and stigma. Assessing the impact of HIV seropositivity or AIDS is best done in the context of asking about individuals' understanding of their diagnosis or illness and its impact. For some persons with HIV/AIDS, verbalizing the understanding of illness can be relieving as well as revealing. It is the chance for the patient to reveal painful experiences encountered at home, school, camp, workplace, or community, and the anguish of AIDSism and stigma.

Sexual History Assessing sexual history has important implications for both self-care and public health as well as for evaluation for sexual addiction. A comprehensive sexual history is summarized in Table 2.

Trauma History The association of trauma and PTSD with nonadherence to risk-reduction and medical care make history of trauma and response to trauma an essential aspect of HIV/AIDS assessment.

Drug History It is important to be able to take a complete history of substance use for each individual with HIV or AIDS who is referred for psychiatric consultation. Patients are often reluctant to discuss drug addiction and may see their addiction as so much a part of their everyday lives that it is not even given a second thought. Furthermore, defensiveness and denial may need to be understood as concomitants of addictive disorders. An extremely benevolent and nonjudgmental approach is essential to help diminish defensiveness. An important part of the history-taking is to be able to ask questions that are ego-supportive. Addiction history may be more accessible after learning about crises, traumas, and losses, and later determining whether substances may have been used to console or self-medicate at

the times of crisis, loss, or trauma. Using "how," "when," and "what" questions can facilitate history-taking and avoid the potential blaming aspects of "why" questions.

Clinician awareness of the street slang names for addictive substances can be helpful in history-taking.

Specific questions for substance-use history-taking in HIV are summarized in Table 3.

Suicide History The high prevalence of suicide in persons with HIV and AIDS makes this both an essential and routine part of the evaluation. Although antiretrovirals and competent HIV clinical care have lowered the prevalence of suicide, the rate of suicide remains high in persons with HIV and AIDS (18–21).

Psychiatric Examination The recognition and treatment of psychiatric disorders in persons at risk for or diagnosed with HIV or AIDS can alleviate distress, improve adherence, and prevent HIV transmission.

Cognitive Assessment A thorough and detailed evaluation for cognitive deficits is important for differentiating delirium and dementia and assessing for HAND as well as for other forms of cognitive impairment in persons with HIV. Conventional screening tools such as the Folstein Mini-Mental State Exam (MMSE) (22) are not adequate for detecting HAND-associated subcortical dementia. Although there is no substitute for a complete cognitive evaluation by an HIV psychiatrist and, where available, a neuropsychologist, some screening tools are both sensitive and specific for HAND. Assessments designed for the HIV-infected population, such as the HIV Dementia Scale (23, 24), modified HIV Dementia Scale (25), and Mental Alternation Test (26), are superior to the MMSE for detecting HAND. HAND diagnosis needs to be differentiated from other forms of HIV-associated cognitive impairment (27), such as that associated with IRIS, end-stage renal or liver disease, or progressive multifocal leukoencephalopathy. Recognition and treatment of dementia can prevent the tragic consequences of nonadherence to risk-reduction and medical care.

Treatment Approaches to AIDS Psychiatry

Psychotherapeutic treatment modalities include crisis intervention, psychotherapy, couples therapy, family therapy, group therapy, outreach, relaxation response, yoga, meditation, and exercise.

Important issues involving HIV psychopharmacology include the special vulnerabilities of persons with HIV/AIDS to

TABLE 2. Sexual History-Taking

<p>Setting the Tone</p> <ol style="list-style-type: none"> 1. Often people with HIV/AIDS experience problems with their sexual function. How has HIV affected your sexual function? 2. How does your sexual function since you were diagnosed compare with that when you were HIV-negative? 3. Often people with psychiatric illness such as depression experience problems with their sexual function. What is your sexual function like since you have been ill? 4. How is your sexual function since you have been depressed (or had another psychiatric illness) compared with that when you were healthy? 5. Often people who need to take medications experience problems with their sexual function. What is your sexual function like since you have been on (the medication)? 6. Since you have been on (the medication), how does your sexual functioning compare with that before starting (the medication)? 7. What is your sexual orientation? 8. With which gender do you identify? 9. When and how did you discover your gender identity? 10. What words do you prefer to use to describe your sexual identity? 11. Do feelings about your sexual identity play a role in your current level of distress? 12. Have you come out as LGBT to your family? To your friends? To your coworkers or classmates? 13. Do you currently experience any conflicts regarding religion or spirituality and your sexuality? 14. Do you experience any conflicts in your daily life regarding your sexuality? 15. Have you been in significant love or romantic relationships in your life? 16. Have you ever been a victim of a hate crime? 17. Have you experienced bullying in school, camp, or in the workplace? <p>Sexual Experience</p> <ol style="list-style-type: none"> 18. What is your sexual activity like? 19. What types of sex do you engage in? 20. How have the changes in your hormones affected your sexual function? 21. How enjoyable is sex for you? 22. How enjoyable is masturbation for you? 23. Do you have (a) sexual partner(s)? 24. Are you sexually active? 25. Do you engage in any form of sexual behavior that worries you or your partner? 26. What is the frequency of your sexual activity? 27. Have you noticed a change in the frequency of your sexual activity? 28. Have you ever had a sexually transmitted infection (herpes, gonorrhea, chlamydia, syphilis, HPV) or HIV? 29. How do your religious beliefs affect your sexuality? 30. How do your cultural beliefs affect your sexuality? 31. Which of your sexual practices do you associate with feelings of shame? 32. Which of your sexual practices do you associate with feelings of anxiety? 33. Which of your sexual practices do you associate with feelings of unhappiness? 34. Do you feel that you are addicted to sex? <p>Safe and Unsafe Sex</p> <ol style="list-style-type: none"> 35. What methods are you using to prevent yourself from getting sexually transmitted infections? How many sexual partners do you have? 36. How many sexual partners have you had? 37. How has your number of sexual partners changed over time? 38. What kind of barrier contraception are you using? 39. What kind of spermicidal preparation are you using? 40. What lubricants do you use during sexual intercourse? 41. Are you aware that petroleum-based lubricants (Vaseline and others) can cause leakage of condoms? 42. How do you put on a condom? 43. At what point during intercourse do you put on a condom? 44. How do you ensure that there is no air bubble trapped inside the condom? 45. While wearing a condom, how do you ensure that there is no leakage during intercourse? 46. How do you ensure that there is no leakage upon condom removal? 47. Do you find it difficult to maintain an erection while using a condom? 48. Have you considered female condom use?
--

the extrapyramidal side effects of psychotropic and antiemetic medications, as well as the vulnerability to anticholinergic side effects. An awareness of drug–drug interactions and hepatic

metabolism of medications is also essential. As with geriatric care, all psychotropic medications should be used with caution using the axiom of “start very low, and go very slow.”

TABLE 3. Substance Use History-Taking

<p>1. Many people who are ill may use drugs or alcohol to get through difficult times. What have you used to get through these times?</p> <p>2. Specifically ask about all drugs by name and street name:</p> <p>Alcohol</p> <p>Heroin: dope, smack, horse, chieva, chiva, China white</p> <p>Cocaine: coke, candy, nose candy, blow</p> <p>Cannabis: marijuana, weed, dope, pot, joints</p> <p>Sedative-hypnotics: primarily benzodiazepines such as alprazolam, Xanax, clonazepam sticks</p> <p>Inhalants: printer cartridges, rubber cement and other glues, aerosolized chemicals</p> <p>Hallucinogens: lysergic acid diethylamide (LSD), acid, blotter, microdot; psilocybin: mushrooms, 'shrooms</p> <p>Methamphetamine: speed, ice, crystal meth, crank, Christina, Tina</p> <p>Dimethoxymethylamphetamine: DOM, STP</p> <p>Methylenedioxymethamphetamine: MDMA, Ecstasy, X, XTC, E, Thizz</p> <p>Ketamine: K, special K, Ket, super K, vitamin K</p> <p>Gamma-hydroxybutyric acid or GHB: liquid E, Georgia Home Boy</p> <p>Phencyclidine: angel dust</p> <p>3. Precipitants</p> <p>A. What led to your first trying (the specific substance or substances) _____?</p> <p>B. What was your reaction to it?</p> <p>C. How were you able to get it?</p> <p>D. What effect did it have on the problem, crisis, or trauma in your life?</p> <p>4. Chronology</p> <p>A. When did you first use _____?</p> <p>B. What happened after that?</p> <p>C. What other drugs or alcohol did you use?</p> <p>D. How did using _____ affect your school, work, and relationships?</p> <p>E. What kind of trouble did you get into?</p> <p>F. When did you last use?</p> <p>5. Amounts, routes, and access</p> <p>A. What is the most you can hold or use in a day?</p> <p>B. How do you take it?</p> <p>Intravenous: with or without sharing of needles or works</p> <p>Insufflation, or snorting</p> <p>Smoking</p> <p>Subcutaneous, or skin-popping</p> <p>Oral</p> <p>C. What illegal means did you resort to in order to get it?</p> <p>Exchange of sex for drugs</p> <p>Shoplifting</p> <p>Identity theft</p> <p>Selling antiretrovirals or other prescribed medicines</p> <p>Selling belongings</p> <p>Selling family belongings</p> <p>Robbery, violent crime</p> <p>6. Course, stage of change, and treatments</p> <p>Have you been in substance abuse treatment programs?</p> <p>Have you ever wanted to or tried to stop using? If so, when?</p> <p>Does substance use pose a risk or harm to you at this time?</p> <p>7. Have you considered 12-step programs such as Alcoholics Anonymous, Cocaine Anonymous, Narcotics Anonymous?</p> <p>8. Would you consider use of specific treatments (agonist therapy) such as methadone or buprenorphine for heroin addiction or naltrexone for alcohol addiction?</p>	
--	--

Examples of psychopharmacologic treatment modalities (1, 7) and online resources include the following:

1. Johns Hopkins Point of Care Information Technology Site
<http://www.hopkins-hivguide.org/>
2. University of Liverpool HIV Drug interactions list
<http://www.hiv-druginteractions.org/>

3. Medscape HIV/AIDS

<http://www.medscape.com/hiv?src=pdown%2520and%2520http://hivinsite.ucsf.edu/>

4. www.hiv-pharmacogenomics.org

5. New York Department of Health HIV Guidelines: Substance abuse in patients with HIV/AIDS HIV Clinical

Guidelines for the Primary Care Provider:

<http://www.hivguidelines.org>

6. http://www.tthivclinic.com/interact_tables.html

Conclusion

This comprehensive biopsychosocial HIV and AIDS curriculum can provide psychiatry residents and their faculty with a model for a learning-teaching experience that can be integrated in each year of training and in each educational setting. At the same time, this training program will help provide a compassionate and integrated approach to persons with HIV and AIDS (28–30) and multi-morbid medical illnesses and a model for prevention of HIV transmission.

References

1. Cohen MA: History of AIDS psychiatry: a biopsychosocial approach: paradigm and paradox, in *Comprehensive Textbook of AIDS Psychiatry*. Edited by Cohen MA, Gorman JM. New York, Oxford, 2008, pp 3–14
2. Cohen MA, Gorman JM: *Comprehensive Textbook of AIDS Psychiatry*. New York, Oxford, 2008
3. Novack DH, Cameron O, Epel E, et al: Psychosomatic medicine: the scientific foundation of the biopsychosocial model. *Acad Psychiatry* 2007; 31:388–401
4. Wright MT: Training psychiatrists in nonpsychiatric medicine: what do our patients and our profession need? *Acad Psychiatry* 2009; 33:181–186
5. Gitlin DF, Levenson JL, Lyketsos CG: Psychosomatic medicine: a new psychiatric subspecialty. *Acad Psychiatry* 2004; 28:4–11
6. Polan HJ, Auerbach MI, Viederman M: AIDS as a paradigm of human behavior in disease: impact and implications of a course. *Acad Psychiatry* 1990; 14:197–203
7. Cohen MA, Goforth HW, Lux JZ, et al: *Handbook of AIDS Psychiatry*. New York, Oxford, 2010
8. Cohen MA: AIDSism: a new form of discrimination. *AMA News* 1989; 32:43
9. [CDC] Centers for Disease Control and Prevention (CDC): HIV Surveillance, United States, 1981–2008. *MMWR Morb Mortal Wkly Rep* 2011; 60:689–693; accessed online 06/03/11: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6021a2.htm?s_cid=mm6021a2_w.
10. UNAIDS: 2010. *Global Report: UNAIDS Report on the Global AIDS Epidemic, 2010*. UNAIDS: Geneva, Switzerland; accessed online 06/02/2011: http://www.unaids.org/globalreport/documents/20101123_GlobalReport_em.pdf.
11. AIDSvu: Persons Living With HIV by County. AIDSvu: Emory University, Atlanta, GA; accessed online 06/02/11: <http://www.aidsvu.org/>.
12. Hall HI, Song R, Rhodes P, et al: Estimation of HIV incidence in the United States. *JAMA* 2008; 300:520–529. Accessed online on 06/02/2011: <http://jama.ama-assn.org/content/300/5/520.full.pdf+html>.
13. [CDC]Centers for Disease Control (CDC): *Pneumocystis pneumonia*: Los Angeles. *MMWR Morb Mortal Wkly Rep* 1981; 30:250–252
14. Blank MB, Mandell DS, Aiken L, et al: Co-occurrence of HIV and serious mental illness among Medicaid recipients. *Psychiatr Serv* 2002; 53:868–873
15. Cohen MS, Shaw GM, McMichael AJ, et al: Acute HIV-1 infection. *N Engl J Med* 2011; 364:1943–1954
16. Cohen MA, Batista SM, Lux JZ: A biopsychosocial approach to psychiatric consultation in persons with HIV and AIDS, in *Handbook of AIDS Psychiatry*. Edited by Cohen MA, Goforth HW, Lux JZ, et al. New York, Oxford, 2010, pp 33–60
17. Freedman JB, O’Dowd MA, Wyszynski B, et al: Depression, HIV dementia, delirium, posttraumatic stress disorder (or all of the above). *Gen Hosp Psychiatry* 1994; 16:426–434
18. Cohen M, Hoffman RG, Cromwell C, et al: The prevalence of distress in persons with human immunodeficiency virus infection. *Psychosomatics* 2002; 43:10–15
19. Carrico AW: Elevated suicide rate among HIV-positive persons despite benefits of antiretroviral therapy: implications for a stress and coping model of suicide. *Am J Psychiatry* 2010; 167:117–119
20. Keiser O, Spoerri A, Brinkhof MW; Swiss HIV Cohort Study ; Swiss National Cohort: Suicide in HIV-infected individuals and the general population in Switzerland, 1988–2008. *Am J Psychiatry* 2010; 167:143–150
21. Carrico AW, Johnson MO, Morin SF; NIMH Healthy Living Project Team: Correlates of suicidal ideation among HIV-positive persons. *AIDS* 2007; 21:1199–1203
22. Folstein MF, Folstein SE, McHugh PR: “Mini-Mental State:” a practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res* 1975; 12:189–198
23. Power C, Selnes OA, Grim JA, et al: HIV Dementia Scale: a rapid screening test. *J Acquir Immune Defic Syndr Hum Retrovirol* 1995; 8:273–278
24. Berghuis JP, Uldall KK, Lalonde B: Validity of two scales in identifying HIV-associated dementia. *J Acquir Immune Defic Syndr* 1999; 21:134–140
25. Davis HF, Skolasky RL Jr, Selnes OA, et al: Assessing HIV-associated dementia: Modified HIV Dementia Scale versus the Grooved Pegboard. *AIDS Read* 2002; 12:29–31, 38
26. Jones BN, Teng EL, Folstein MF, et al: A new bedside test of cognition for patients with HIV infection. *Ann Intern Med* 1993; 119:1001–1004
27. Lyketsos CG, Schwartz J, Fishman M, et al: AIDS mania. *J Neuropsychiatry Clin Neurosci* 1997; 9:277–279
28. Cohen MA, Alfonso CA, Hoffman RG, et al: The impact of PTSD on treatment adherence in persons with HIV infection. *Gen Hosp Psychiatry* 2001; 23:294–296
29. Ricart F, Cohen MA, Alfonso CA, et al: Understanding the psychodynamics of non-adherence to medical treatment in persons with HIV infection. *Gen Hosp Psychiatry* 2002; 24:176–180
30. Cohen MA: Psychodynamic psychotherapy in an AIDS nursing home. *J Am Acad Psychoanal* 1999; 27:121–133