HIV and Mental Health: An Update

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What’s New in HIV and Mental Health

- Health insurance and reimbursement changes
- Modified definitions of psychiatric disorders (DSM-5)
- The 2013 I-Stop law in New York State
- Increased focus on the “cascade” of engagement in HIV care
- The 2014 HCV testing law in New York State
- Newer and better treatments for HCV infection
- Greater awareness of mortality due to tobacco smoking
- Expansion of screening for mental disorders to aid in achieving integrated medical/mental health care
- New findings specific to mental illness and HIV
Ryan White and the Affordable Care Act

- In the U.S., the Affordable Care Act (ACA) will make more people with HIV infection eligible for Medicaid coverage.

- The ACA includes expanded mental health care coverage.

- Medicaid already covers much more of the costs for HIV care than the Ryan White Care Act.

- Ryan White funds are still viewed by advocates as essential to “completion of care”, covering services that Medicaid does not pay for.

- Many efforts are underway to preserve Ryan White funding.

- Much uncertainty remains—we’re in transition!
The DSM-IV Mental Disorders Most Commonly Seen in HIV+ People

- Mood disorders
- Anxiety disorders
- Adjustment disorders
- Alcohol/Substance use disorders
- HIV-associated neurocognitive disorders (HAND)
- Personality disorders
- Psychotic disorders
New diagnostic criteria for psychiatric disorders were published by the American Psychiatric Association in May, 2013.

The changes are described in the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5), which is used to make psychiatric diagnoses in the U.S.

The following slides describe some of the changes that apply to diagnoses commonly seen among people with HIV infection.
A Few Highlights About Transitioning from DSM-IV to DSM-5 Relevant to HIV

- The Roman numeral is gone from the book’s title!

- Bipolar disorders are now in category of their own, separate from depressive disorders, in acknowledgement of their greater severity.

- PTSD moved out of anxiety disorders into a new category called trauma and stressor-related disorders.

- Adjustment disorders also moved into the new category of trauma and stressor-related disorders.
A Few Relevant Highlights About Transitioning from DSM-IV to DSM-5

◆ The categories of substance abuse and dependence have been eliminated and replaced by categorizing substance use disorders as mild, moderate or severe.

◆ The multi-axial system of diagnosis has been eliminated. Therefore personality disorders are classified like all other mental disorders and are no longer listed on Axis II.
A Few Relevant Highlights About Transitioning from DSM-IV to DSM-5

- The DSM-5 newly recognizes HIV-related neurocognitive disorders:
  - Major neurocognitive disorder due to HIV infection, with or without behavioral disturbance
  - Mild neurocognitive disorder due to HIV infection
- For all disorders, diagnostic criteria have been refined.
I-Stop Law Took Effect in New York State

♦ The law took effect on 8/27/13.

♦ It targets opioid painkillers and some categories of psychotropic medications: stimulants, benzodiazepines and certain sleep medications.

♦ Before prescribing these drugs clinicians must check on-line if patients have filled other such prescriptions.

♦ Will this help curb prescription drug abuse?

♦ Will this inhibit legitimate prescribing for pain, insomnia, anxiety, attention deficit problems?

♦ How will this affect the care and treatment of HIV+ people with substance use problems, pain, insomnia, and/or mental illnesses?
The Cascade of Engagement in HIV Care

- The cascade of engagement in care is featured prominently in discussions at major HIV conferences.

- Nonetheless the impact of substance use and other mental disorders on engagement is HIV care is usually not part of this dialogue.
We can't ignore mental illnesses and expect to provide effective HIV prevention and treatment.

The CDC Cascade: In the U.S., only 28% of HIV+ People Are Retained on Antiretrovirals and Achieve Viral Suppression.
First Step in the Cascade: HIV Testing

♦ The CDC recommends routinely offering HIV testing to all patients in health care settings aged 13-64.

♦ As a Grade A recommendation of the US Preventive Services Task Force, HIV testing is reimbursable (2013).

♦ Late detection of HIV infection is associated with poorer outcomes and increased HIV transmission.

♦ Most mental health and substance use programs still do not offer HIV testing.

♦ This is a lost opportunity. It would be very helpful for programs to explore ways to overcome the barriers to HIV testing.
Remaining Steps in the Cascade of Engagement in HIV Care

♦ The remaining steps are linkage to care, retention in care, initiating antiretroviral treatment (ART) and adhering to ART with a suppressed viral load.

♦ There is good evidence that substance use and other mental disorders are associated with problems with engagement in care, but little evidence about how mental health interventions impact this problem.

♦ The limited studies on the impact of treating mental disorders on engagement in HIV care explore primarily the final step--adherence to ART.
Untreated depression is associated with failure to access HIV care and treatment.

Untreated depression is associated with slower viral suppression on ART and failure to adhere to HIV care and treatment.

Untreated depression is associated with increased morbidity and mortality.

Taking antidepressants is associated with better biological outcomes, including increased CD4 cell counts and decreased viral load.
There are a handful of randomized controlled trials looking at whether treatment of depression improves adherence to antiretroviral treatment (ART).

The interventions examined were antidepressants and cognitive behavioral strategies.

The number of subjects in each trial were small.

The results suggest that treating depression does not by itself improve adherence to ART; this requires interventions targeted to the ART adherence goal.

The body of research linking depression treatment to engagement in HIV care remains very limited.
Untreated substance use is associated with failure to access and adhere to treatment and faster viral rebound on ART.

Many strategies exist to reduce risky behaviors, prevent HIV infection, treat addiction and prolong life.

- Clean injection equipment
- Substitution treatment for opioid addiction (methadone and buprenorphine)
- A variety of other medications and psychotherapies for alcohol, stimulants, marijuana and other forms of substance misuse and addiction; multiple addictions may be present
- But we lack randomized controlled clinical trials of the impact of substance use treatment on engagement in HIV care.
Studied are conflicting regarding whether PTSD is associated with non-adherence.

PTSD is associated with loss of trust which can interfere with the therapeutic alliance.

People with schizophrenia have adherence similar to the general population in HIV care. They are accustomed to dealing with stigma and the side-effects of medications.
2012 Review of HIV-related Linkage and Retention Studies

♦ An IAPAC expert panel did a literature review of interventions to enhance entry into and retention in HIV care and antiretroviral treatment (ART).

♦ 325 studies met quality criteria to be included

♦ Recommendations have been published: see Thompson et.al., 2012, Ann Intern Med, 156: 817-833
Abbreviated Summary of Expert Panel Evidence-Based Recommendations

♦ Monitor care and ART adherence
♦ Use case management, outreach, maybe peer support
♦ Use simplest possible ART regimen
♦ Use adherence tools
♦ Provide education, support, counseling
♦ Address food insecurity, housing, transportation
♦ Provide structured PMTCT programs
♦ Treat substance use, depression, other mental illnesses
♦ Use directly observed therapy with incarcerated and those using substances
♦ Develop youth focused approaches
HCV infection is a common co-morbidity and cause of mortality among people with HIV infection.

HCV infection is more common among people with mental illness than it is in the general population.

Most people with HCV infection do not know they are infected.

All patients known to be infected with HIV should be screened for HCV infection.

Patients with high-risk behaviors should be screened for HCV infection.

Anyone born between 1945 and 1965 should be screened once for HCV infection as most U.S. cases occur in this age cohort. Such screening became a CDC recommendation in 2013.
Number of People Currently Infected with HIV and/or HCV Infection in the U.S.

- HIV: 1.2 million
- HCV: 3.2 million
New Hepatitis C Screening Law in NYS

- This law took effect on January 1, 2014
- It requires the offer of a hepatitis C screening test to every individual
  - Born between 1945 and 1965 receiving inpatient or primary care
    - Primary care=
      - In outpatient department of a hospital OR
      - In a freestanding diagnostic and treatment center OR
      - From a physician, physician assistant, or nurse practitioner providing primary care
  - Exceptions:
    - Individual is being treated for a life-threatening emergency OR
    - Individual has previously been offered or has been subject of hepatitis C screening test (except that a test shall be offered if otherwise indicated) OR
    - Individual lacks capacity to consent to a hepatitis C screening test
- Why people born during this period?
  - Account for ~3/4 of all HCV infections in the US
  - Account for 73% of HCV-associated mortality
  - At greatest risk for liver cancer and other HCV-related morbidity and mortality
  - Follow-up care or referral required for individuals with reactive screening tests
- Offer must be culturally and linguistically appropriate

www.nyhealth.gov OR www.nyc.gov/health OR hepatabc@health.state.ny.us
Approaches to HCV in Mental Health Settings

♦ Psychiatric programs should arrange for/test patients for HCV.

♦ Patients testing positive for HCV should be referred for evaluation, immunization as needed (Hepatitis A and B) and potential HCV treatment.

♦ Avoid psychotropic medications with liver toxicity.

♦ Monitor liver enzymes while on psychotropics.

♦ Advocate for/assist with HCV assessment and treatment.

♦ Monitor for depression and worsening of psychotic symptoms while on antiviral therapy; treat as necessary.
Approaches to HCV Infection

- Following a positive test for HCV infection, patients should be screened for alcohol use and offered interventions as necessary (CDC, 2013).

- Cure of Hepatitis C (HCV) has dramatically improved since new medications were approved in 2011 and 2013.

- Many more medications for HCV infection are in phase 2 and 3 clinical trials, and rates of cure are expected to approach 100% in the future.

- The first interferon sparing medication regimen became available in 2013 for some types of HCV infection; other such regimens will soon be available.

- Interferon sparing regimens greatly reduce the toxicity of HCV treatment, including the incidence of depression.
One prominent study of tobacco smoking was conducted from 1995-2010 in Denmark where HIV care and treatment is free.

2,921 HIV+ patients age 35 or over were followed for 14,281 person years and compared to controls.

The number of life-years lost in association with HIV was 5.1

The number of life-years lost in association with HIV + smoking was 12.3.

Kaplan-Meier curve showing survival by age, stratified by human immunodeficiency virus and smoking status for all study subjects


♦ The study investigated a U.S. nationally representative probability sample of 9,282 people.

♦ Adults who met ICD-10 criteria for mental disorders in the past 12 months smoked at almost twice the rate of adults without mental disorders.

♦ Smokers with high levels of psychological distress smoked a higher average number of cigarettes a day.

Lawrence D et. al., BMC Public Health, 2009
Rates of smoking by type of mental disorder:

- No mental disorder: 21%
- Any anxiety disorder: 38%
- Any mood disorder: 45%
- Any substance use disorder: 64%

Lawrence D et. al., BMC Public Health, 2009
Almost half of all cigarettes in the U.S. are consumed by people with a mental disorder.

Among adolescents, the risk of smoking initiation is higher among those with greater hostility or depressive symptoms.

Bupropion increases smoking abstinence rates in smokers with schizophrenia without jeopardizing their mental state.
HIV Associated Neurocognitive Disorders

NIMH working group, Neurology 2007

- Asymptomatic neurocognitive impairment (ANI),
- HIV-associated mild neurocognitive disorder (MND)
- HIV-associated dementia (HAD)

- Milder impairment has become more common and severe impairment has become less common among people with HIV infection.

- Beyond ART that achieves viral suppression, no consistent diagnostics or therapeutics are available for this problem.
Frequency of HIV-Associated Neurocognitive Disorders: Charter Study

N=1555 community dwelling HIV+ participants in the U.S. without confounding factors

- HIV-associated dementia: 2%
- HIV-associated mild neurocognitive disorder: 12%
- Asymptomatic neurocognitive impairment: 33%

Heaton, et. al. Neurology 2010
Other Common Causes of Neurocognitive Impairment in HIV+ People

◆ HCV infection
  ➢ HCV is associated with cognitive impairment even in the absence of liver failure.

◆ Alcohol and substance use related conditions

◆ Psychiatric illness, especially severe depression

◆ Aging will increasingly play a role
Strategies to Meet the Challenge of Neurocognitive Disorders

◆ The brain is protected by beginning ART before CD4 count is less than 200.

◆ Treat contributing co-morbid medical problems—numerous disorders and substance use contribute to cognitive impairment.

◆ Assess for and treat depression, which is commonly accompanied by cognitive impairment (there is a bi-directional relationship).

◆ Changing antiretroviral treatment has been shown to help in a small number of individual patients who had “CNS escape”.

Reference documents at www.psych.org/aids and www.hivguidelines.org
Screening for Mental Disorders Leads to Improved Detection and Treatment in Primary/HIV Care
Assessing Mental Status Changes in HIV + People

Look for underlying biological cause

1. Medications: HIV, psychiatric, other
2. Substances: Alcohol, drugs, herbal, other
3. Non-HIV medical problems
4. HIV-related illnesses:
   • CNS lesions, infections
   • Non-CNS medical problems

Psychiatric Syndromes

• HIV-associated Neurocognitive Disorders (HAND)
Some Easy to Use Screening Tools: PHQ-2, PHQ-9 and GAD-7

- Readily available online at no charge
- Already translated into multiple languages
- Well studied in general medical populations
- Easy to administer or self administer
- Can be used to screen and/or make a diagnosis
- Can be used to follow patient’s progress
Screening for Depression:
PRIME-MD PHQ2

Over the last two weeks how often have you been bothered by any of the following problems:

♦ Little interest or pleasure in doing things.
  ➢ 0=Not at all
  ➢ 1=Several days
  ➢ 2=More than half the days
  ➢ 3=Nearly every day

♦ Feeling down, depressed or hopeless
  ➢ 0=Not at all
  ➢ 1=Several days
  ➢ 2=More than half the days
  ➢ 3=Nearly every day

If the score is 3 or more, move to the PHQ9.
Diagnostic Instrument for Depression: PHQ9 – Items Rated from 0-3

♦ 1. Little interest or pleasure in doing things
♦ 2. Feeling down, depressed, or hopeless
♦ 3. Trouble falling or staying asleep, or sleeping too much
♦ 4. Feeling tired or having little energy
♦ 5. Poor appetite or overeating
♦ 6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down
♦ 7. Trouble concentrating on things, such as reading the newspaper or watching television
♦ 8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual
♦ 9. Thoughts that you would be better off dead or of hurting yourself in some way
Diagnostic Instrument for Generalized Anxiety Disorder:
GAD-7 – Items Rated from 0-3

♦ 1. Feeling nervous, anxious or on edge
♦ 2. Not being able to stop or control worrying
♦ 3. Worrying too much about different things
♦ 4. Trouble relaxing
♦ 5. Being so restless that it is hard to sit still
♦ 6. Becoming easily annoyed or irritable
♦ 7. Feeling afraid as if something awful might happen
Questions to Identify PTSD

In your life, have you ever had any experience that was so upsetting, frightening, or horrible that you:

◆ Have nightmares about it or think about it when you do not want to?

◆ Try hard not to think about it or go out of your way to avoid situations that remind you of it?

◆ Are constantly on guard, watchful, or easily startled?

◆ Feel numb or detached from others, activities, or your surroundings?

References and more tools:  www.hivguidelines.org
Screening for Hazardous Alcohol Use: Audit-C Questionnaire

♦ There are 3 questions:

➢ How often do you have a drink containing alcohol?
➢ How many standard drinks containing alcohol do you have on a typical day?
➢ How often do you have six or more drinks on one occasion?

◆ Each item is rated on a five-point scale used to identify hazardous alcohol use.

◆ The Audit-C is easily accessed online at no charge.
Screening for Substance Use:
Cage-AID (CAGE Adapted to Include Drugs)

Target Population: Adults and Adolescents > 16

♦ Have you ever felt the need to *cut* down on your use of alcohol or drugs?

♦ Has anyone *annoyed* you by criticizing your use of alcohol or drugs?

♦ Have you ever felt *guilty* because of something you’ve done while drinking or using drugs?

♦ Have you ever taken a drink or used drugs to steady your nerves or get over a hangover (eye-opener)?

A total of ≥ 2 may be suggestive of a problem
References and more tools: www.hivguidelines.org
Screening for HIV-related Neurocognitive Disorders

- There are no simple screening tools to diagnose asymptomatic impairment or mild neurocognitive disorder. Simple tools (such as the MMSE) pick up advanced cortical deficits.

- Neuropsychological testing takes 1-4 hours

- Multiple co-morbidities and aging complicate the differential dx

Valcour, et. al. CID, 2011
5-10 Minute Screens for Severe Neurocognitive Impairment

- HIV Dementia Scales: original (includes saccadic eye movements), modified (removes eye movements), and international versions—validated in HIV

- Montreal Cognitive Assessment (MoCA)—free, online, translated into multiple languages; not yet validated in HIV; may also pick up milder impairment

Valcour, et. al. CID, 2011
Limitations of Screening Instruments

- Sensitivity and specificity limitations, as well as cultural factors, can lead to false negatives and false positives.

- Further patient evaluation is often needed for definitive diagnoses.

- Without treatment options, screening is ineffective.
Treatment of Mental Disorders in People Living with HIV/AIDS:
Some Key Points
Using Psychotropic Medication with HIV+ People: Key Points

Medically asymptomatic and not on antiretroviral treatment

- Most psychotropics can be used as usual
- Monitor use of typical antipsychotics for increased incidence of extrapyramidal side effects
- Evaluate for testosterone deficiency if depressed or fatigued
Using Psychotropic Medication with HIV+ People: Brief Summary

Medically Ill and/or on antiretroviral treatment

- For most psychotropics, start with low doses and increase slowly

- Check for interactions and overlapping toxicities between psychotropics and antiretrovirals

- Protease inhibitors and cobicistat (in Stribild) are especially potent inhibitors of cytochrome P450 enzymes—use caution
Antidepressants: Limited studies; SSRIs Are the Most Studied

- In general, SSRIs are well tolerated, safe, and have lower rates of drug discontinuation in studies with HIV-infected patients – all have equal efficacy.

- SSRIs have proven efficacy in clinical trials with HIV+ depressed patients.

- Drug interactions need to be considered with fluoxetine and paroxetine.

- Avoid paroxetine in pregnancy (category D).
Antipsychotics and Mood Stabilizers

◆ Antipsychotics: very few studies
  - Older neuroleptics- high rates of extrapyramidal side effects
  - Newer “atypical” antipsychotics – easier to use, but have metabolic complications

◆ Mood stabilizers: very few studies
  - Avoid carbamazepine – lowers ARV levels
  - Avoid lithium with HIV-associated nephropathy and GI disturbances
Use of Psychotropic Medications: Other Key Points

- Protease inhibitors and cobicistat increase the levels of newer sleep medications (zolpidem/Ambien, zaleplon/Sonata, eszopindone/Lunesta) and most benzodiazepines.

- Do not use benzodiazepines to treat delirium in medically ill HIV+ patients.
Interactions Between Antiretrovirals and Alternative / Recreational Drugs

- Interactions can occur -- much is unknown
- Concerns about the interaction between ritonavir and ecstasy
- Methadone dose may need to increase (or, less often, decrease) depending on the antiretroviral regimen
- St. John’s Wort may lower levels of NNRTIs and protease inhibitors
Common Treatment Dilemmas in Patients with HIV, Mental Illness and Substance Use

- Adequate access to and integration of mental health and substance use services.

- Maintaining adherence in patients with three chronic relapsing disorders.

- Provider countertransference to “self-destructive” and “manipulative” patient behaviors.

- Balancing harm reduction approaches with sensible limit-setting.

- Adequate differential diagnosis.