Childhood Trauma, PTSD, and HIV: Association with Non-Adherence to Risk Reduction and HIV Medical Care

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Ms. A is a 44 year old HIV positive unemployed certified addiction counselor, divorced mother of five children ages 6 to 24, grandmother of one baby boy who was referred during her last pregnancy because of active cocaine use.

The patient was abused physically and sexually during her childhood. She began to use drugs as a teenager. She became pregnant with her first baby, a son, at the age of 15 as did her eldest daughter. Her eldest son has spent most of his years in correctional facilities for drug-related activities.
Ms. A, continued

Ms. A used cocaine by insufflation to numb the pain of her trauma. She had multiple abusive partners. The last is the father of her youngest child. He was arrested for abusing Ms. A and sentenced to 12 years in a correctional facility.

Ms. A has intrusive thoughts and flashbacks about him and is terrified that he will be released early and assault her once again.
Ms. A, continued

Ms. A has nightmares, hypervigilance, easy startle, insomnia, flashbacks, intrusive thoughts, and a sense of a foreshortened future.

She began psychotherapy while pregnant with her 5th child and entered a residence for pregnant and addicted women. While there, she remained adherent to medical and psychiatric care for eighteen months.
Ms. A advanced rapidly through her program’s levels and was close to graduation when she went out to buy a birthday cake for her son’s first birthday. After a single lapse to cocaine for 3 days and missed her son’s birthday entirely. After repeating and completing all of her levels, she obtained certification and began working at a full time job.
Ms. A worked for nearly a year, moved into her own apartment, got all four of her young children back together, and functioned well for about half a year.

She then became non-adherent with medical and psychiatric care and relapsed to cocaine.

Her daughter left school and became pregnant at the age of 15, repeating her mother’s pattern of teen pregnancy.

Ms. A lost her job, car, and her children.
Early Childhood Trauma is Associated with

- Later trauma including interpersonal partner violence as a result of mastery through repetition and turning the passive into the active
- PTSD
- Substance Use Disorders
- Commercial Sex Work
- HIV Transmission
Early Childhood Trauma is Associated with

- Posttraumatic Stress Disorder
- Substance Use Disorders
- Mood Disorders
- Eating Disorders
- Sexual Disorders
- Dissociative Disorders
Early Childhood Trauma-Induced PTSD is Associated with

- Non-adherence to HIV risk reduction
- Delay in HIV testing
- Delay in obtaining HIV testing results
- Later diagnosis of HIV
- Non-adherence to HIV medical appointments
- Non-adherence to HIV medical treatments

Boarts et al, 2006
Posttraumatic Stress Disorder, HIV, and Nonadherence

Many persons with HIV have experienced significant trauma.

30 to 50% of persons with HIV meet criteria for PTSD as compared with 8 to 13% in the general population.

As many as 60% are untreated.

There is a high prevalence of distress in persons with HIV.

Antoine B. Douaihy
American Psychiatric Association
Institute for Psychiatric Services 2007
Prevalence of Distress in HIV

- 72.3% prevalence of distress on the Distress Thermometer
- 70.0% prevalence of anxiety on the HADS
- 45.5% prevalence of depression on the HADS

Cohen et al. *Psychosomatics* 2002; 43:10-15
Prevalence

- 31% meet criteria for Acute Stress Disorder (ASD)  *Koopman et al, 2002*
- Co-occurrence of depression, PTSD, and ASD among persons with HIV
- Consistent with the higher rates of traumatic life events  *Israelski et al, 2007*
Prevalence

• 43% who met criteria for PTSD, ASD, or depression were not receiving treatment

• Major clinical implications

Israelski et al, 2007
Scope of the Problem

- 62% of persons with HIV reported experiencing at least one traumatic event
- Half of individuals who reported experiencing physical harm identified their HIV status as a cause of the violence
- PTSD predicted lower adherence
- PTSD has the potential to adversely affect health outcomes

Zierler et al, 2000
Boarts et al, 2006
Women with HIV are more likely to experience a traumatic event

Physical and sexual assaults and other criminal victimization

There are patterns of repeated trauma in both women and men

There are high rates of trauma and interpersonal violence among men

Brief et al, 2004
PTSD

• Exceptionally high prevalence of PTSD in persons with HIV
• Etiology: early childhood and other trauma and being diagnosed with HIV
• Rates of childhood abuse are exceptionally high among men and women with HIV and AIDS
• Contributing factors: Post-trauma environments of poverty, violence, drugs, and lack of social support
PTSD, Substance Use Disorders, and HIV: Synergistic Epidemics

- A link between trauma exposure, PTSD, and drug use may be established early in life
- PTSD and substance use disorders are synergistic
- Base rates for alcohol and drug use are considerably higher among persons with HIV and result in further risk of exposure to traumatic events leading to PTSD
- PTSD may contribute to high rates of risky behaviors, predisposing to infection with HIV

Bing et al, 2001; Brief et al, 2004
Case Vignette: Ms. B

- Ms. B is a 48 year old employed office manager, mother of one living son and one deceased son, and recovered heroin addict (abstinent for 12 years) who is HIV positive and is status post treatment and cure of HCV. She has a history of early childhood physical abuse and abandonment and is followed for PTSD with weekly psychotherapy and treated with antidepressants.
Ms. B, continued

• Ms. B has a history of addiction to heroin, selling heroin, and identity theft. She spent time in federal correctional facilities.

• Both her first and second husband were murdered and her third partner died of AIDS.

• Her oldest son was 13 when he accidentally shot and killed his 9 year brother.
Ms. B, continued

- Subsequently, her son began to sell drugs and has spent most of his adult life in federal correctional facilities where he remains to date.
- Ms. B is adherent to her medical and psychiatric care and is coping exceptionally well with her job and family situations. She visits her son regularly and is supportive toward her sister who has HIV-HCV due to drug use.
AIDS Psychiatry:
A Paradigm for Integrated Care

• Complex and severe medical and psychiatric illness
• Persons with AIDS are vulnerable
  – medically
  – psychiatrically
  – socially
AIDS Psychiatry

- Stigmatized illnesses
- Vulnerable populations
- Stigmatized populations
- Multidisciplinary team approach
- Integrated, comprehensive, and compassionate care
Adherence to Prevention and Treatment

Vulnerable Populations

Women
African-American

Latino-American

Men who have sex with men

Addicted Children
Elderly

Prevention

Barrier contraception
Drug treatment
Safe sex
Sterile works
Trauma prevention

Sex
Trauma
Drugs
Infection
Death

Taboo Topics

Severe Multisystem Illness

Hepatitis C
STDs
TB

PTSD
Dementia
Delirium

Psychosis
Injecting Drug Use

PCP
CMV
PML

Lethality

Dermatological
Endocrinological
GI
Infectious
Neurological
Oncological
Ophthalmological
Psychiatric
Pulmonary

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Elderly

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Psychiatry

AIDS

Elderly
"PTSD emerged as... the only significant predictor of HIV" among persons with severe mental illness in the Five-Site Health and Risk Study

Essock SM, et al. 2003
PTSD and HIV Often Comorbid

• 30 – 50% of HIV patients meet criteria for PTSD
• 60% of those go untreated
• Overlap with depression and other psychiatric disorders

Antoine B. Douaihy
American Psychiatric Association
Institute for Psychiatric Services 2007
Psychiatric Vectors of HIV

- PTSD
  - sense of foreshortened future, problems with caring for self and body, unsafe sex
- Mania
  - disinhibition and hypersexuality
- Psychosis
  - disinhibition and regression
- Depression
  - low self-esteem and self-worth
- Cognitive impairment
  - disinhibition and regression
- Substance Use Disorders
  - exchange of sex for drugs, sharing works, unsafe sex
New AIDS Cases

• USA
  – 45,000 per year as of 2007
  – increased from 40,000 as of 2005

• World
  – 2,500,000 per year as of 2007
  – decreased from 5,300,000 as of 2005

UNAIDS. AIDS Epidemic Update 2007
New Cases: Major Causes

- Unprotected sexual behavior
- Sharing needles and drug paraphernalia
SAFE
SEX
Nonadherence in HIV

- Public health implications
  - HIV transmission
- Suffering
- Increased morbidity
- Increased mortality
- Decreased survival
Adherence

• Need 95% adherence to ARVs
• Need 100% adherence to safer sex
• Need 100% adherence to use of sterile works
Adherence and Disclosure

- Adherence means disclosing serostatus as well as using condoms
- People lie for sex *
- Fear of rejection
- Fear of abandonment
- AIDS stigma

* Cochran SD, Mays VM. Sex, lies, and HIV. NEJM 1990; 22:774-775
Death and Dying

Tragic Results of PTSD and other Psychiatric Barriers to Adherence

- Lack of access to care
- Nonadherence to care
- Stopping and starting ARVs
- Emergence of viral mutations and viral multidrug resistance
- Dying of opportunistic infections
Recognition and Treatment of PTSD

- PTSD as vector of HIV
- PTSD as barrier to adherence
- Psychiatric treatment: ↓ transmission
  ↑ adherence
Organization of AIDS Psychiatry

• Founded 2004, meets twice yearly
• To develop networks
• To present work and share findings
• To develop consensus on treatment
• To develop collaborative research
• To educate other clinicians and trainees
• macohen@nyc.rr.com to join – no dues
Comprehensive Textbook of AIDS Psychiatry
Edited by Mary Ann Cohen and Jack M. Gorman

“I commend the editors and their contributors for preparing this important overview of the psychosocial and psychiatric sequelae of a pandemic that we thought could not happen in the ‘modern’ world.”—Jimmie Holland, MD, Wayne E Chapman Chair in Psychiatric Oncology, Memorial Sloan Kettering Cancer Center; Professor of Psychiatry, Weill Medical College of Cornell University

“HIV, once a deadly plague, has been transformed into a serious chronic illness. This has further demanded that all who care for HIV patients understand the broad nature of HIV from both medical and psychosocial perspectives. Comprehensive Textbook of AIDS Psychiatry is a unique resource for such data and should be on the shelves of all who care for such patients…Its breadth of information and easy readability set the standard for future editions.” —Thomas N. Wise, MD, Professor of Psychiatry, Johns Hopkins University School of Medicine; Editor, Psychosomatics