A Biopsychosocial Approach to Pain in Persons with AIDS: Dilemmas in Palliative Care

Mary Ann Cohen, MD
Clinical Professor of Psychiatry
Mount Sinai School of Medicine
Overview

- Psychodynamics of undermedication for pain in severe and complex medical illness
- Biopsychosocial approach to pain in persons with HIV and AIDS
- Specific psychodynamics of undermedication of pain in persons with HIV and AIDS
- Myths and facts about treatment of pain in persons with HIV and AIDS
Psychodynamics of undermedication for pain in severe and complex medical illness

- Marginalization of patients taking opioids
- Unconscious need for pain on part of physicians
- Failure of empathy
- Erroneous assumptions about patients

Peppin, 2009
Perry, 1984
Passik, 2007
Psychodynamics of undermedication for pain in severe and complex medical illness

- Unconscious need for pain on the part of the patient
- Research studies of patient-controlled analgesia (PCA) show that patients tend to avoid the prospect of the complete disappearance of pain
- Patients’ need to “preserve a modicum of pain” can be understood as a way to maintain a sense of the self that is separate from the environment and to protect the self against the prospects of existential disintegration

Perry, 1983, 1984
Forrest et al, 1970
Hull and Sibbold, 1982
Psychodynamics of undermedication for pain in severe and complex medical illness

Dr. Samuel Perry reflects on the under treatment of burn patients: “Investigating the under-medication for pain … revealed a grand irony: the staff’s need to preserve a modicum of pain stemmed from the same dynamic that made patients preoccupied with pain, they were all struggling under the most regressive and threatening of circumstances to maintain a coherent sense of self and confirm that they are still alive.”

Perry, 1983, 1984
Psychodynamics of undermedication for pain in severe and complex medical illness

Dr. Samuel Perry further reflects:
“The widespread reluctance among medical professionals to prescribe adequate doses of narcotics also may derive from unconscious factors, including the projected wishes and fears of defying constraints and the need to preserve a modicum of pain to define the sick role, to maintain ego boundaries and to provide reassurance that the patient is alive.”

Perry, 1984, 1985
Ms. A is a 40 year old divorced disabled woman is in psychodynamic psychotherapy for PTSD. She has chronic renal insufficiency due to recurrent pyelonephritis since age 3 (due to sexual trauma), hepatitis B, severe adult trauma-induced brachial plexopathy, and severe wasting has chronic and severe pain from brachial plexopathy, massive lower extremity edema, and rheumatoid arthritis (rheumatoid factor of 535). She is on a regimen of morphine, methadone, and gabapentin, was told by her internist that she was “on enough opioids to kill an elephant.”
Psychodynamics

- The internist refused to prescribe opioids
- “Enough to kill and elephant!”
- He feared losing his license to practice medicine
- He assumed that the patient was addicted and was not in any pain but was using her doctors to obtain narcotics to get high
- Ms. A found another internist
Potential Barriers to Effective Pain Treatment

- Fear of addiction when using opioids
- Legal obstacles and fear of regulatory agency sanctions (especially when using opioids)
- Fear of side effects of medications
- Ignorance of proper assessment of pain
- Lack of appropriate education in pain management

Ferrell et al, 1992
Hoffman, 1998
Grossman et al, 1991
Cleeland, 1993
Potential Barriers to Effective Pain Treatment

- Beliefs in how patients should respond to pain and its treatment, i.e., the “good patient”
- Ignorance of pain physiology
- Failure to identify pain relief as a priority

Proulx and Jacelon, 2004
Mosely, 2003
Weinstein et al, 2000
Mr. B is a 42 year old bus mechanic with severe peripheral vascular disease s/p second above knee amputation and amputation of all but left thumb and index finger who complained of pain 72 hours following his amputation. His vascular surgeon refused to provide pain medication since “This pain should not last that long.” Psych consult was requested.
## Potential Barriers to Effective Pain Treatment

- Failure of the health care system to hold clinicians, physicians, and others accountable for pain relief
- Cost constraints and inadequate insurance coverage
- Patient reluctance to take medications

Weinstein et al, 2000  
Cleeland, 1993  
Dar et al, 1992
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- Myths and facts about treatment of pain in persons with HIV and AIDS
Biopsychosocial Approach to Pain in Persons with HIV and AIDS

- Complex and severe medical and psychiatric illness
- Breadth of manifestations
  - elements of nearly every other illness
- Persons with AIDS are vulnerable
  - medically
  - psychiatrically
  - socially

Multimorbid Severe and Complex Multisystem Illness

- Hepatitis C
- HIV-nephropathy
- Depression
- Dementia
- Delirium
- IV and other Drug Use
- ETOH
- PTSD
- HAD
- PCP
- CMV
- PML

Prevention
- Barrier contraception
- Alcohol treatment
- Drug treatment
- Safe sex
- Sterile works
- Trauma prevention

AIDS

Psychiatry

Adherence to Prevention and Treatment

Lethality

Vulnerable Populations

- Women
- African-American
- Latino-American
- Men who have sex with men
- Addicts
- Children
- Elderly
Biopsychosocial Approach to Pain in Persons with HIV and AIDS

- Multi-marginalized populations
- Vulnerable populations
- Multiple stigma and taboo
- Sex
- Drug addiction
- HIV
- Infection
- Multimorbid illness
Biopsychosocial Approach to Pain in Persons with HIV and AIDS

- Increase in deaths from non-HIV related causes: 19.8% to 26.3% from 1999 – 2004
- Non-HIV related deaths: substance use, cardiac and cancer accounted for 76%
- Need for a comprehensive approach to medical and mental health

<table>
<thead>
<tr>
<th>Biopsychosocial Approach to Pain in Persons with HIV and AIDS</th>
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<tbody>
<tr>
<td>• Persons with psychiatric disorders may lack access to care</td>
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<td>• May die of nonadherence to care</td>
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<td>• Can benefit from medical and psychiatric care</td>
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<td>• Treatment of depression not only alleviates suffering but decreases viral load</td>
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Antoni et al. 2006
Biopsychosocial Approach to Pain in Persons with HIV and AIDS

- Depression magnifies pain
- Pain magnifies and complicates depression
- Treatment of depression can diminish pain severity
- Treatment of pain can alleviate depression and distress
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
High Prevalence of HIV Infection in Persons with Mental Illness

- HIV prevalence is 0.6% in the U.S. general population
- HIV prevalence is 7.8% among persons with mental illness in the U.S.
- HIV prevalence is 3X higher in persons with schizophrenia and 4X higher in persons with mood disorders

UNAIDS 2002
Clin Psychol Rev 1997; 17:259–269
Psychiatric Services 2002; 53:868-873
Higher Prevalence of HIV with Untreated Mental Illness

- HIV rate is estimated to be much higher with untreated serious mental illness and may be 10 to 20 times that of the general population

Vulnerability to Mental Illnesses: the 5 Ds of HIV Psychiatry

- Dementia
- Delirium
- Depression
- Drug dependence
- Death by suicide
Need for Integrated Care in HIV-HCV Coinfection

- Alcohol dependence doubles the risk of cirrhosis in HIV-HCV coinfection
- Persons with HIV-HCV are more vulnerable to depression
- Persons on treatment with Interferon/ribavirin are vulnerable to depression, suicide, and psychosis

Maillard and Sorrell, 2005
Raison et al., 2006
Braithwaite et al., 2005
Koziel and Peters, 2007
Hoffman et al., 2003
Vulnerability to Medical Illnesses: Pulmonary

• Opportunistic infections
  – *Pneumocystis carinii* pneumonia, *toxoplasma gondii*, aspergillosis, *mycobacterium avium* complex (MAC)
• Tuberculosis
• Lymphocytic interstitial pneumonitis
• Kaposi’s sarcoma
• Non-Hodgkin’s lymphoma
Vulnerability to Medical Illnesses: Neurologic

- HIV-associated dementia (HAD)
- HIV-myelopathy
- HIV-neuropathy
- Opportunistic infections
  - *toxoplasma gondii*, cytomegalovirus, progressive multifocal leukoencephalopathy (PML)
- Central nervous system (CNS) lymphoma
- CNS herpes simplex and herpes zoster
Vulnerability to Medical Illnesses: Gastrointestinal

• Opportunistic infections
  – candida (oral, esophageal), cytomegalovirus
• Diarrhea and wasting
  – cryptosporidiosis, microsporidiosis, giardia lamblia, clostridium difficile, cytomegalovirus
• HIV-related hepatocellular disease, granulosing hepatitis, sclerosing cholangitis
• Hepatitis B and C, cirrhosis, and ESLD
• Pancreatitis
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<tr>
<th>Vulnerability to Medical Illnesses: Neoplastic and Hematologic Disease</th>
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<tbody>
<tr>
<td>• Kaposi’s sarcoma</td>
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<td>• CNS lymphoma</td>
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<td>• Non-Hodgkin’s lymphoma</td>
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<td>• Hodgkin’s disease</td>
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<td>• Anogenital carcinoma</td>
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<td>• Cervical carcinoma</td>
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<tr>
<td>• Anemia</td>
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<tr>
<td>• Thrombocytopenia</td>
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<td>• Neutropenia</td>
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Vulnerability to Medical Illnesses: Cardiac

- HIV-cardiomyopathy
- Pulmonary hypertension
- Endocarditis
- Pericarditis
- Neoplastic
  - Kaposi’s sarcoma, lymphoma
- Opportunistic infections
  - TB, MAC, *cryptococcus neoformans*, candida, *toxoplasma gondii*
Vulnerability to Medical Illnesses: Renal

- HIV-related nephropathy (HIVAN)
- Membranoproliferative glomerulonephritis
- Systemic lupus erythematosus
- Amyloidosis
- End-stage renal disease
AIDS Psychiatry: Psychiatry at the Interface

- Medicine
- Infectious Diseases
- Gastroenterology
- Neurology
- Cardiology
- Nephrology
- Pulmonology
- Hepatology
- Dermatology
- Obstetrics
- Pediatrics
- Geriatrics
- Homeless outreach
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### Specific psychodynamics of undermedication of pain in persons with HIV and AIDS

- AIDSism and stigma
- Negative countertransference
- High prevalence of substance use disorders and magnification of fears that the patient will become addicted
- Lack of education about the need for pain medication when a substance user is in remission on methadone as agonist therapy
- Lack of understanding of how to medicate for pain when a substance user is in remission on methadone as agonist therapy
Case Vignette: Mr. C

Mr. C is a 58 year old married grandfather and disabled chef who is a long-term non-progressor with HIV, CD4 of 1382, and undetectable viral load (never treated with antiretroviral medications) and has been depressed and suicidal since his HIV diagnosis. He has multimorbid medical illnesses as well as a prior history of depression. He was an IV heroin user in full sustained remission for 30 years on Methadone, 120 mg as agonist therapy in a Methadone Maintenance Treatment Program.
Pain Treatment in Persons with HIV who are on Methadone Agonist Treatment

Mr. C was diagnosed with major depressive disorder recurrent, severe, with chronic suicidal ideation, active nicotine cigarette dependence. He engaged easily in weekly psychotherapy and agreed to attempt smoking cessation. He responded well to dynamic psychotherapy, family therapy, and medication with venlafaxine XR, 150 mg and quetiapine, 25 mg at bedtime for augmentation. Bupropion XL, 150 mg was added for smoking cessation as well as augmentation. He responded to a recommendation to use jigsaw puzzles to keep occupied and prevent cigarette cravings but refused nicotine substitution. Mr. C has not smoked for 2 yrs.
Pain Treatment in Persons with HIV who are on Methadone Agonist Treatment

Mr. C is followed in an ambulatory AIDS center and has oxygen-dependent severe emphysema with mild cyanosis, pulmonary hypertension, rheumatic heart disease, untreated hepatitis C, and benign prostatic hypertrophy. He has a longstanding history of major depressive disorder, recurrent, and suicidal ideation. Mr. C’s suicidal thoughts rarely leave him and are related to HIV stigma.
Mr. C experienced severe right hip pain after a minor fall. When the pain persisted, he consulted his HIV clinician who diagnosed severe Paget’s disease that was apparent on x-ray examination. He was treated for Paget’s disease by a rheumatologist and sent to Pain Management for severe and debilitating hip pain.
Pain Treatment in Persons with HIV who are on Methadone Agonist Treatment

Mr. C’s pain persisted in severity and intensity despite treatment with NSAIDS. Since Mr. C is stoic, reluctant to “be a bother” to his doctors, and fearful of opioid addiction (despite 30 years of sobriety) he made no effort to obtain relief and continued to limit his activities and suffer from pain.
Pain Treatment in Persons with HIV who are on Methadone Agonist Treatment

When his suicidal ideation intensified, I called his Pain Management physician to let her know that I planned to give him a prescription for Methadone 10 mg bid to alleviate his hip pain that had not responded to NSAIDS. She agreed with this plan. The addition of Methadone, 20 mg to his 120 mg agonist dose provided adequate pain relief. His suicidal ideation diminished and he had no pain for the first time in three months.
Mr. C was able, in individual and family therapy, to accept that he was not a burden to his family but a beloved, productive, valued member, and a reliable caregiver to his grandchildren. Although he remains intermittently suicidal, he is gradually working on the development of a sense of meaning and purpose and is less depressed and is adherent to medical and psychiatric care.
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Myths and facts about treatment of pain in persons with HIV and AIDS

- Myth: HIV and AIDS are not painful illnesses
- Fact: Multimorbid HIV- and non HIV-related medical illnesses can cause severe pain
- Fact: Persons with HIV and AIDS have biopsychosocial factors that result in pain intensification
Myths and facts about treatment of pain in persons with HIV and AIDS

• Myth: Substance users in Methadone Maintenance Treatment Programs should not need any additional opioid medication for severe pain
• Fact: Agonist treatment with methadone saturates Mu receptors but does not treat pain
• Fact: Persons who are on Methadone agonist treatment need additional treatment with narcotics if other treatments such as NSAIDS fail to alleviate pain
Myths and facts about treatment of pain in persons with HIV and AIDS

- Myth: Physicians who care for persons with HIV/AIDS are compassionate and can understand the need for pain relief in their patients
- Fact: While most HIV clinicians are compassionate and caring, some are subject to the same biases as the general population
- Fact: Some HIV clinicians fear that their patients may divert prescription drugs
- Fact: Some HIV clinicians may not know how to prescribe narcotics to persons on Methadone
Myths and facts about treatment of pain in persons with HIV and AIDS

• Myth: Physicians who care for persons with HIV/AIDS are compassionate and provide adequate pain relief without fearing that their patients will become addicted or relapse to heroin use

• Fact: Some HIV clinicians fear that the prescription of narcotics will lead to addiction

• Fact: Some HIV clinicians fear that prescription of narcotics will lead to relapse to heroin and an increase in AIDS transmission

• Fact: Adequate pain treatment prevents relapse
AIDS and Injection Drug Use

- >1/3 of new cases in US from IV drug use
- 40% of US AIDS deaths related to drug use
- All drugs of abuse cause intoxication and increase risky sexual behaviors
  - increasing spread of HIV, HBV, and HCV

www.drugabuse.gov/scienceofaddiction/sciofaddiction.pdf
Unique Role of Psychiatrists in the HIV Epidemic

- Psychiatrists have long-term, non-judgmental, trusting relationships
- Psychiatrists routinely take sexual histories
- Psychiatrists routinely take drug histories
- Psychiatrists encourage behavior change
- Psychiatrists do crisis intervention, psychotherapy, pharmacotherapy, couple, family, and group therapy
AIDS Psychiatry

- Stigmatized illnesses
- Vulnerable populations
- Stigmatized populations
- Multidisciplinary team approach
Multimorbid Severe and Complex Multisystem Illness

- Hepatitis C
- HIV-nephropathy
- Depression
- Dementia
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- IV and other Drug Use
- ETOH
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Cardiac
Dermatological
Endocrinological
GI
Infectious
Neurological
Oncological
Ophthalmological
Psychiatric
Pulmonary
Renal

Prevention
Barrier contraception
Alcohol treatment
Drug treatment
Safe sex
Sterile works
Trauma prevention

AIDS
Psychiatry

Adherence to Prevention and Treatment

Women
African-American
Latino-American
Men who have sex with men
Addicts
Children
Elderly

Vulnerable Populations

Lethality
AIDS Psychiatrists

- Can identify and treat distress and pain
- Can identify and treat psychiatric disorders:
  - Delirium
  - Dementia
  - Depression
  - Drug dependence
  - Alcohol dependence
  - PTSD
The Role of Psychiatrists in the AIDS Pandemic

• Prevention
  
  Can promote adherence to:
  
  – safe sex
  – drug treatment
  – harm reduction
  – needle exchange

• Treatment
  
  Can improve adherence to:
  
  – medical care
  – antiretrovirals
  
  Can decrease:
  
  – suffering
  – morbidity
  – mortality
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
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<th>Academy of Psychosomatic Medicine AIDS Psychiatry SIG</th>
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<td>• Founded 2004, meets annually</td>
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<tr>
<td>• To develop networks</td>
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<td>• To present work and share findings</td>
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<td>• To develop consensus on treatment</td>
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<td>• To develop collaborative research</td>
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<tr>
<td>• To educate other clinicians and trainees</td>
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<td>• Has 250 mental health clinician members</td>
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<td>• <a href="mailto:macohen@nyc.rr.com">macohen@nyc.rr.com</a> to join – no dues</td>
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