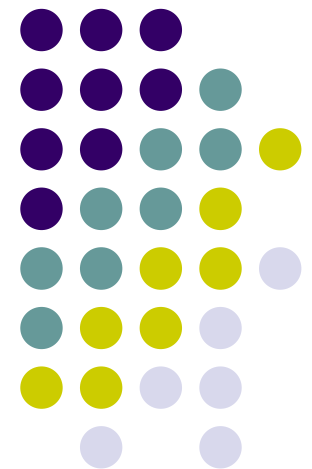
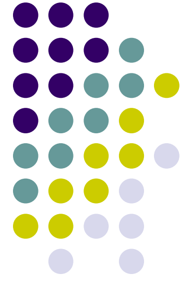
Substance Use Among Women Living with HIV/AIDS



Amina A. Chaudhry, M.D., M.P.H.
Division of General Internal Medicine
Johns Hopkins University School of Medicine
29 April 2008



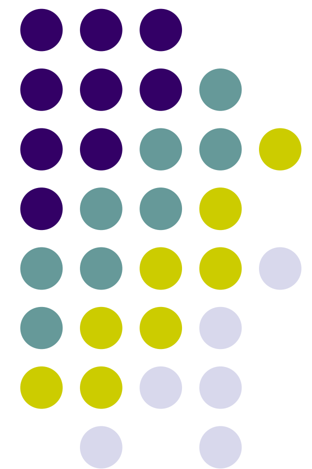
Questions

1. What are two psychosocial factors that increase vulnerability to mental health/substance use disorders among women living with HIV?

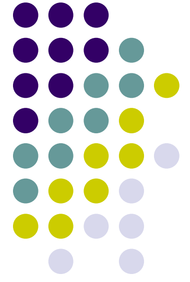
2. What are two barriers to entering treatment for substance use disorders among women?

Disclosures

No relevant financial relationships with commercial interests.



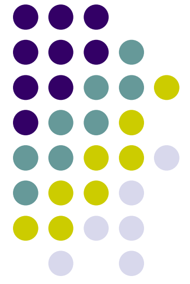
Learning Objectives



- Review diagnostic criteria for substance abuse and dependence
- Discuss risk factors associated with substance use disorders (SUD) among HIV-positive women
- Present an overview of management of the use of three substances commonly misused among HIV-positive women
- Recognize gender-specific differences in substance use disorders
- Describe gender-specific interventions that can improve outcomes in HIV-positive women with SUD.

Diagnostic criteria: substance abuse

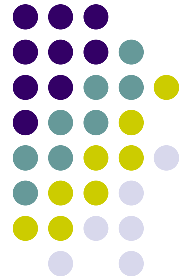
Adapted from: DSM-IV-TR



- recurrent use resulting in a failure to fulfill major role obligations at work, school, or home
- recurrent use in situations in which it is physically hazardous
- recurrent substance-related legal problems
- continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance

(*and--never met the criteria for substance dependence*)

Diagnostic criteria: substance dependence



Adapted from: DSM-IV-TR

Tolerance
- increased amounts
- diminished effects with continued use

Withdrawal
- characteristic withdrawal syndrome, or
- use of the substance to relieve or avoid symptoms

Use of substance in larger amounts/over a longer period than intended

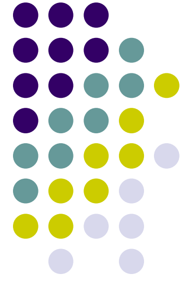
Persistent desire or unsuccessful attempts to cut down or control use

Great deal of time spent: obtaining, using, or recovering

Loss of interest in social, occupational, or recreational activities

Substance use despite knowledge of physical/psychological problems

Addiction as a chronic disease



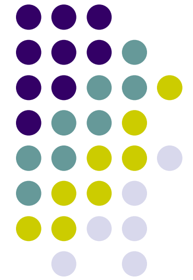
Traditionally viewed as a “social” problem

Traditional treatment expectations mirrored those of acute conditions

Natural history more closely resembles that of a chronic disease

- Heritability comparable to that in other chronic diseases
- Role of personal behaviors
- Enduring neurochemical/pathophysiologic changes even after periods of abstinence
- Untreated persons exhibit progressive disease
- Medications CAN help
- No cure

“Relapse rates” for SUD versus other chronic diseases

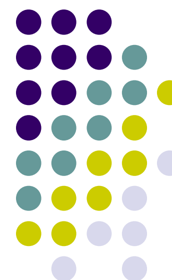


	% patients who relapse
SUD	40-60%
Type 1 DM	30-50%
Hypertension	50-70%
Asthma	50-70%

* For all conditions listed above, SES, lack of family/social supports, and psychiatric comorbidity are major predictors of poorer adherence and outcomes.

McLellan et al. 2000

Past Month Use of Specific Illicit Drugs among Persons Aged 12 or Older: 2006



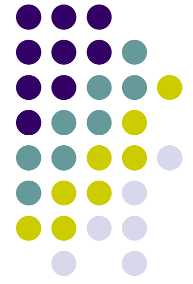
Drug	Numbers in Millions
Illicit Drugs	20.4
Marijuana	14.8
Psychotherapeutics	7.0
Cocaine	2.4
Hallucinogens	1.0
Inhalants	0.8
Heroin	0.3

0 5 10 15 20 25

Numbers in Millions

Source: National Survey on Drug Use and Health (NSDUH) 2006

Need for and Receipt of Specialty Treatment in the Past Year for Illicit Drug or Alcohol Use among Persons Aged 12 or Older: 2006

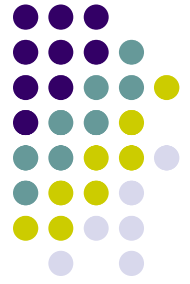


Numbers in Millions Needing Treatment in Past Year

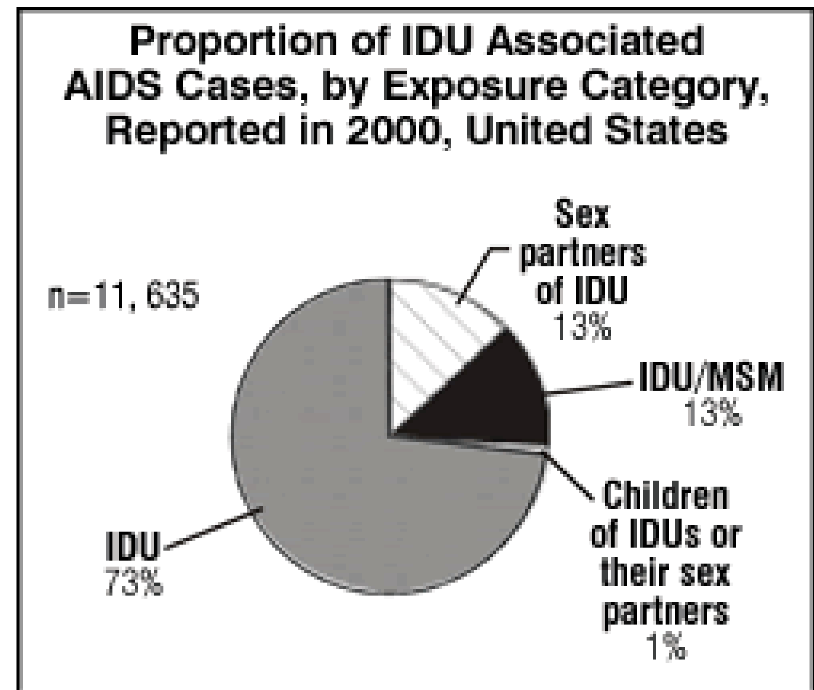
	Received Specialty Treatment	Did Not Receive Specialty Treatment	Total
Illicit Drugs	1.6 (20%)	6.2	7.8
Alcohol	1.6 (8%)	18.0	19.5
Illicit Drugs or Alcohol	2.5 (11%)	21.1	23.6

Source: National Survey on Drug Use and Health (NSDUH) 2006

Injection Drug Use (IDU)

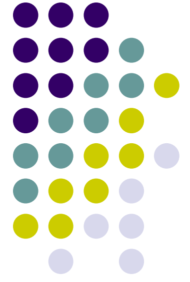


- Estimates suggest about 1 million active IDU in the US
- Since the beginning of the HIV epidemic, IDU has directly and indirectly accounted for 36% of AIDS cases.
- Racial and ethnic minority populations in the US are disproportionately affected by IDU-associated AIDS
- Women are also disproportionately affected



Source: Centers for Disease Control and Prevention. May 2002

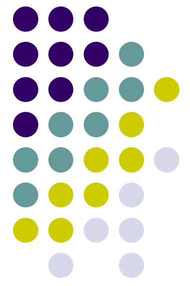
Substance Use among PLWHA



- Active drug/alcohol use has been shown to be:
  - A barrier to treatment adherence
  - A barrier to health care utilization, including receipt of antiretrovirals
  - Associated with inadequate viral suppression
  - Associated with poor health-related quality of life
- One study compared patterns in substance use over time and found that:
  - Switching from non-use to use was strongly associated with worse HIV outcomes and switching from use to non-use was strongly associated with improvements.
  - They also found that among intermittent users, during periods of non-use, *risk of OI was similar to never-users*

Lucas et al (2002 and 2006)

Factors associated with substance use disorders (SUD) among HIV-positive women

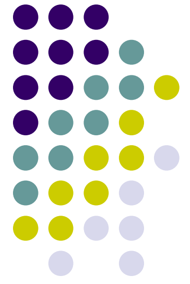


- Little data, few studies have specifically looked at SUD among women with HIV, although research in this area is ongoing

- One study found that each of the following were associated with having a probable SUD or mental health disorder: (RAND)
  - Increasing age
  - Clinical stage
  - Avoidant coping styles
  - Conflict with others
  - Prior physical abuse
  - Need for income assistance
  - Women who put off going to the doctor due to caregiving duties

Sherbourne et al. 2003

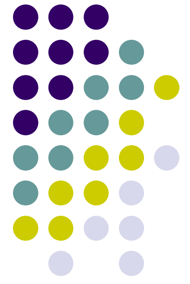
SUD: general treatment goals



1. Help the individual reduce use or achieve abstinence
2. Help the individual reduce the severity or frequency of use
3. Improve psychological and social functioning

Source: American Psychiatric Association

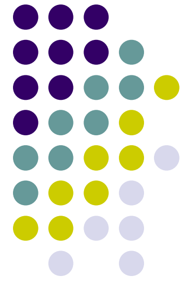
Gender differences in SUD



- Women are more vulnerable to the social and medical consequences of SUD, and may progress faster in addiction
- Before the mid-1990s, most studies of SUD and treatment routinely excluded women
- Women less likely to be identified by their clinician as having a problem (Brienza and Stein MD 2002)
- Low proportion in treatment programs compared to the prevalence of SUD in the population
- Barriers to entering treatment include:
  - Pregnancy/lack of services for pregnant women
  - Fear of losing children/fear of prosecution
  - Childcare issues
  - Economic reasons
- More data are needed comparing gender-specific services with mixed-gender services, however, studies suggest some improvements in:
  - Pregnancy outcomes
  - Psychological well-being
  - Attitudes/beliefs
  - HIV risk reduction

Greenfield et al. 2007

SUD: general treatment modalities

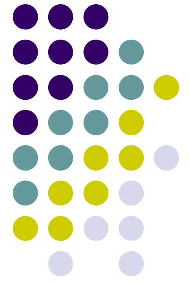


- Psychosocial therapy
  - Cognitive Behavioral Therapy
  - Contingency Management
  - Motivational Enhancement Therapy (MET)
  - Individual/Group therapy
  - 12-step
  - Brief Intervention
  - Self-help groups (AA, NA)

- Pharmacotherapy

Source: American Psychiatric Association

Alcohol Use Disorders (AUD): general

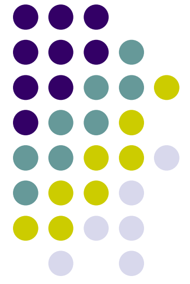


- Management of intoxication/withdrawal
  - Observation
  - Restore fluid/electrolyte balance, supplement with thiamine
  - Benzodiazepines are the cornerstone of withdrawal management. Other adjunct medications may be helpful

- Management of alcohol dependence
  - Consider pharmacotherapy (naltrexone, acamprosate, disulfiram)
  - Consider psychosocial treatments (CBT, 12 step, therapy)
  - Make sure to assess/treat for neurological/physiological sequelae of alcohol

Source: American Psychiatric Association

Women and Alcohol Use Disorders

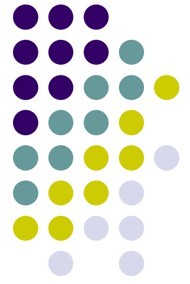


- Gender differences in risk factors for alcohol use
  - Genetics may play a smaller role in women
  - “social sanctions” perceived to be more for women
  - Among alcoholics, the relationship between depression/distress and alcohol use is stronger for women
  - Partners in heterosexual couples tend to have similar drinking patterns
  - History of sexual assault is associated with problem drinking and AUD in both genders (but women more likely to have a history of sexual assault)

- Gender differences in consequences of alcohol use
  - Women demonstrate higher BAL with the same amount of alcohol
  - Women develop alcohol-related physical illnesses with less expsosure
  - Reduced fertility and fetal complications
  - Women with alcohol abuse are more likely to suffer intimate partner violence than non-alcohol-abusing women.

Nolen-Hoeksema. 2004

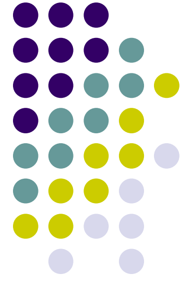
Opioid Use Disorders: general



- Intoxication
  - Observation
  - For severe overdose, may need to administer naloxone
- Withdrawal
  - Opioid agonist therapy: methadone, buprenorphine
  - Clonidine, supportive care
  - Evaluate for withdrawal from other substances
- Dependence
  - Pharmacotherapy
    - opioid agonist *maintenance* therapy
    - (naltrexone maintenance therapy)
  - Psychosocial: CBT, CM, counseling, 12-step, self-help

Source: American Psychiatric Association

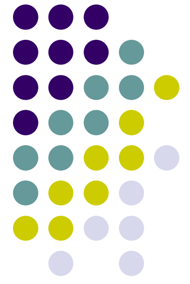
Women and Opioid Use Disorders



- Studies suggest women in methadone maintenance treatment programs (MMTP) have:
  - More psychological and family problems
  - More dependent children
  - More violence-related issues
  - More employment difficulties
  - Rising HIV infection rates and increased risk-behaviors
- Studies suggest men in MMTP have:
  - More legal and financial issues
  - Criminal justice issues
  - More alcohol use disorders

Rowan-Szal et al. 2000

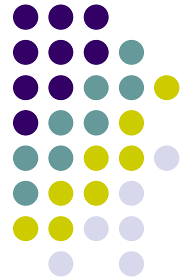
Cocaine Use Disorders: general



- Intoxication
  - Usually self-limited, supportive care
  - May need to manage complications (seizures, hypertension, psychosis)
- Withdrawal: craving and anhedonia
- Dependence
  - Regular participation in treatment
  - CBT, CM, 12-step, counseling, self-help groups
  - No currently FDA-approved pharmacotherapy options, but several are being investigated

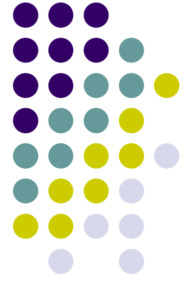
Source: American Psychiatric Association

Women and Cocaine Use Disorders



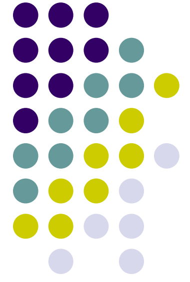
- Although more men than women are cocaine dependent, inner-city, drug using females are more likely to use crack/cocaine than any other illicit drug (Lejuez et al. 2007)
- Women who use crack are more likely to sell sex, have more partners, have an STI, and to be assaulted during a sex exchange (Logan et al 2003)
- Animal studies suggest females may be more sensitive to effects of cocaine and they self-administer more frequently (Lynch et al. 2002)
- Studies suggest estrogen-mediated effects may enhance vulnerability of women to cocaine effects (Lynch and Taylor 2005)

Amphetamine-type stimulants (ATS)



- Use of ATS dramatically increased in the 1990s; the most widely abused illicit drugs after cannabis.
- Southeast Asia is the world's largest market for ATS.
- 25 million people worldwide consume ATS; 63% are methamphetamine (MA) users.
- Associated with high-risk sexual behaviors and increased HIV transmission.

Special Populations: Co-occurring disorders

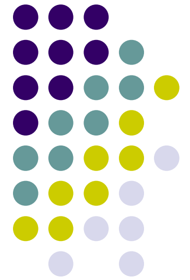


- Both Substance use disorders and mental illness are common among PLWHA.
- ECA data show that among people with lifetime history of SUD, over half also had a history of mental illness.
- Estimates of the prevalence of co-occurring disorders among PLWHA range from 10-28%
- Very little data specifically exist evaluating health and HIV outcomes in this population, particularly among women

Chander et al. 2006

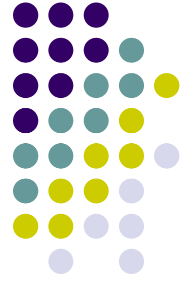
Recommended Best Practices

Source: New York State Department of Health AIDS Institute



- Ask about *partner's* substance use in addition to patient's
- Counsel patients about safer sex, needle sharing and other risk-reduction behaviors
- When referring, consider the individual needs of the patient
  - caregiving
  - pregnancy
- Contraception
  - Condoms in addition to other forms
  - Avoid combination oral contraceptives in abnormal liver function
- Pregnancy
  - Counsel about the effects of drugs and alcohol on the fetus
  - Pregnant HIV infected patients with substance use should be cared for by an HIV specialist and an OB/GYN provider with experience with HIV-positive women
- Screen for trauma, physical, and sexual abuse

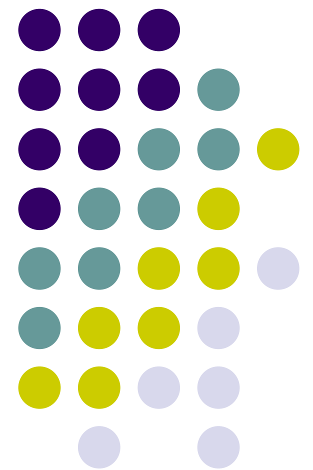
Recommended Best Practices: substance specific



- Alcohol
  - Refer all pregnant women
  - Pregnant women should under medically-supervised withdrawal prior to longer term abstinence-based treatment.
- Among opioid dependent women who become pregnant, MMTP is the preferred treatment
- Cocaine: refer all pregnant women

Source: New York State Department of Health AIDS Institute

Questions?



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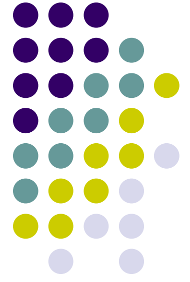

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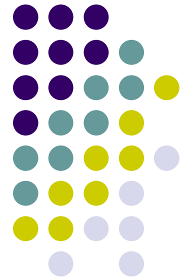

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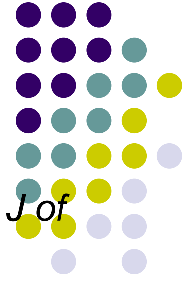

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