

# Gender-Specific Treatment for Mental Health & Substance Use Disorders

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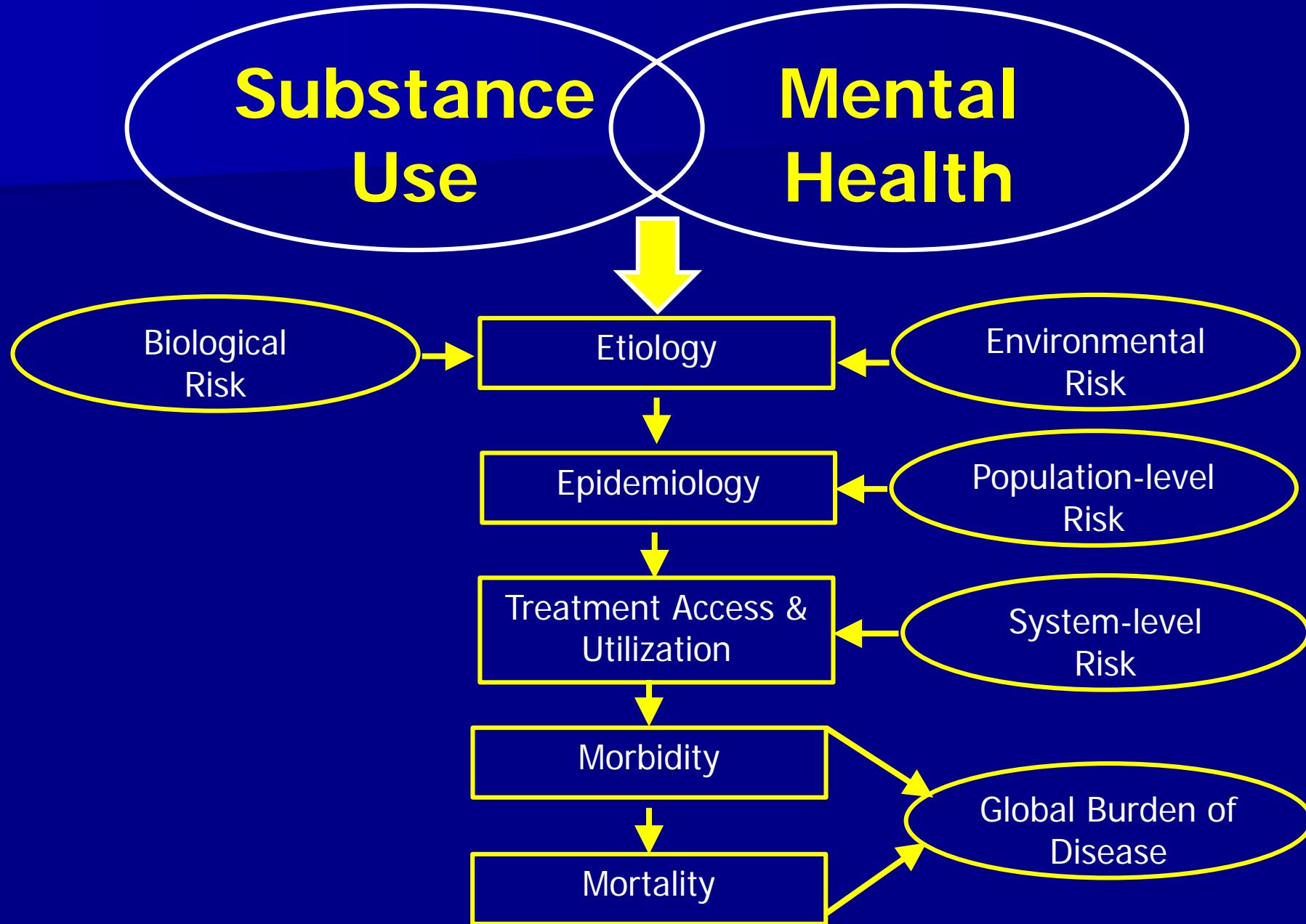
Presented at:

**Workshop on Women's Mental Health across the  
Life Course through a Sex-Gender Lens**

**March 7, 2018**

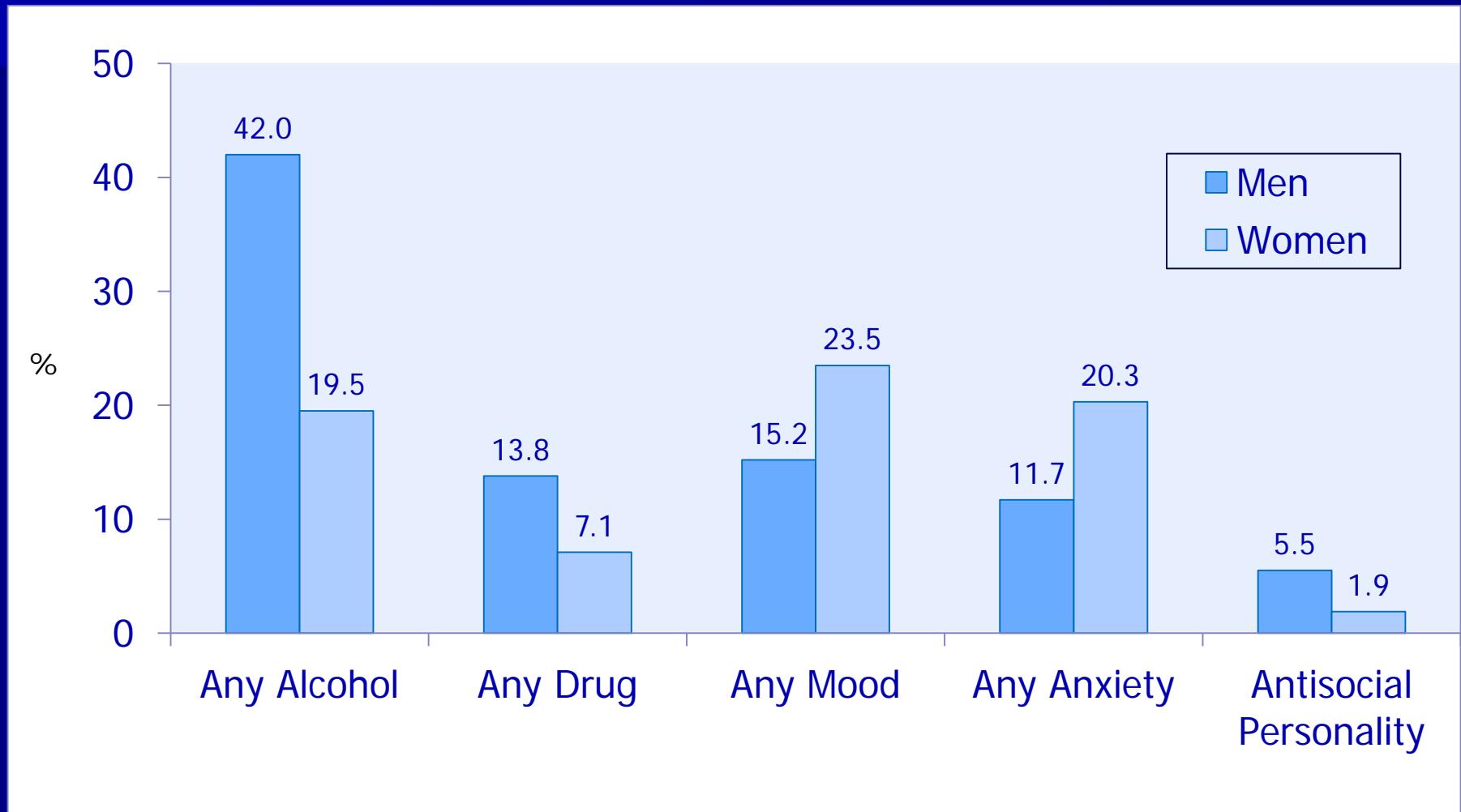


# Gender and Behavioral Disorders



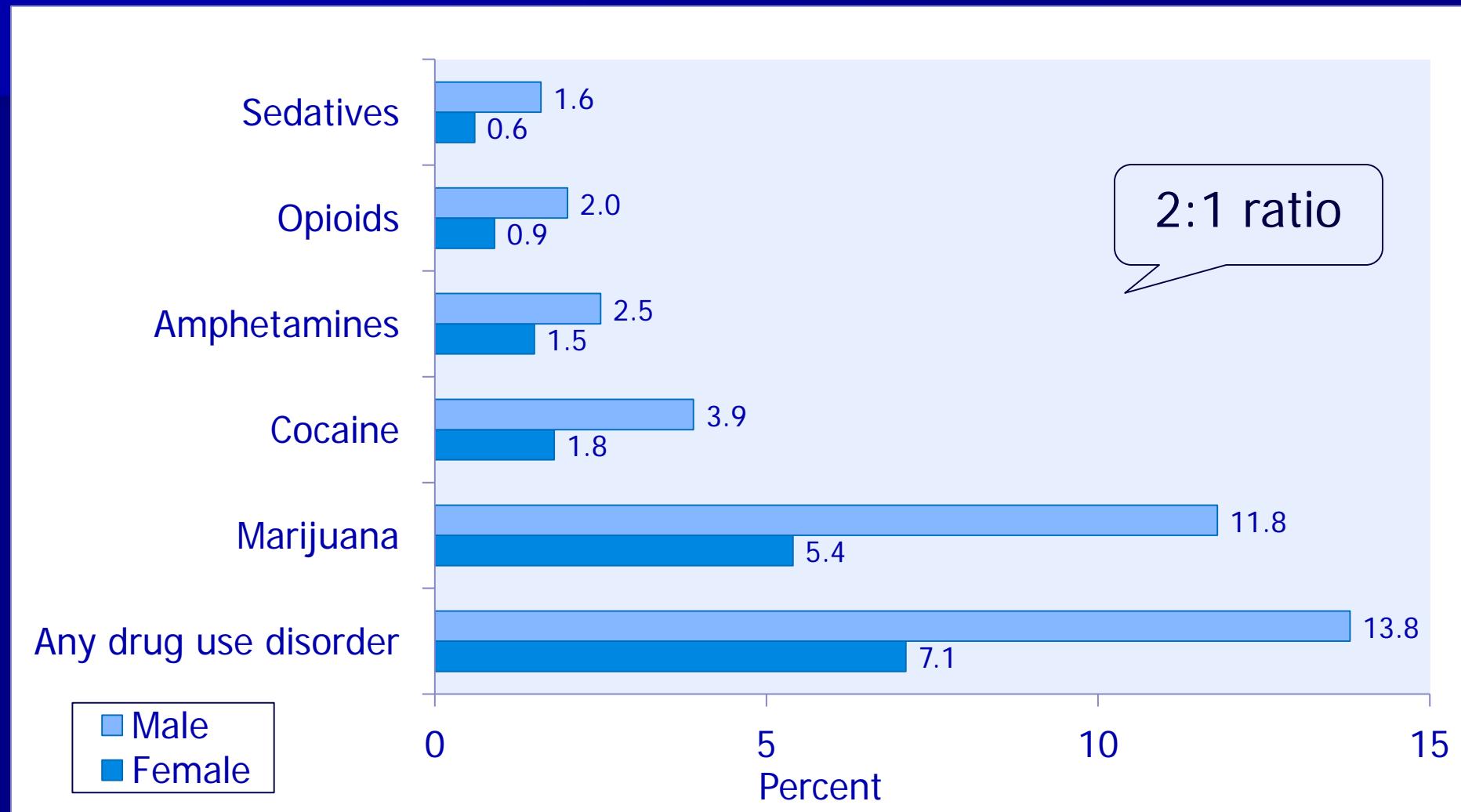
# **Sex Differences in Prevalence of Substance Use Disorders (SUD) and Mental Disorders**

# Lifetime Prevalence of Psychiatric Disorders by Sex in NESARC



Source: Grant et al., 2004

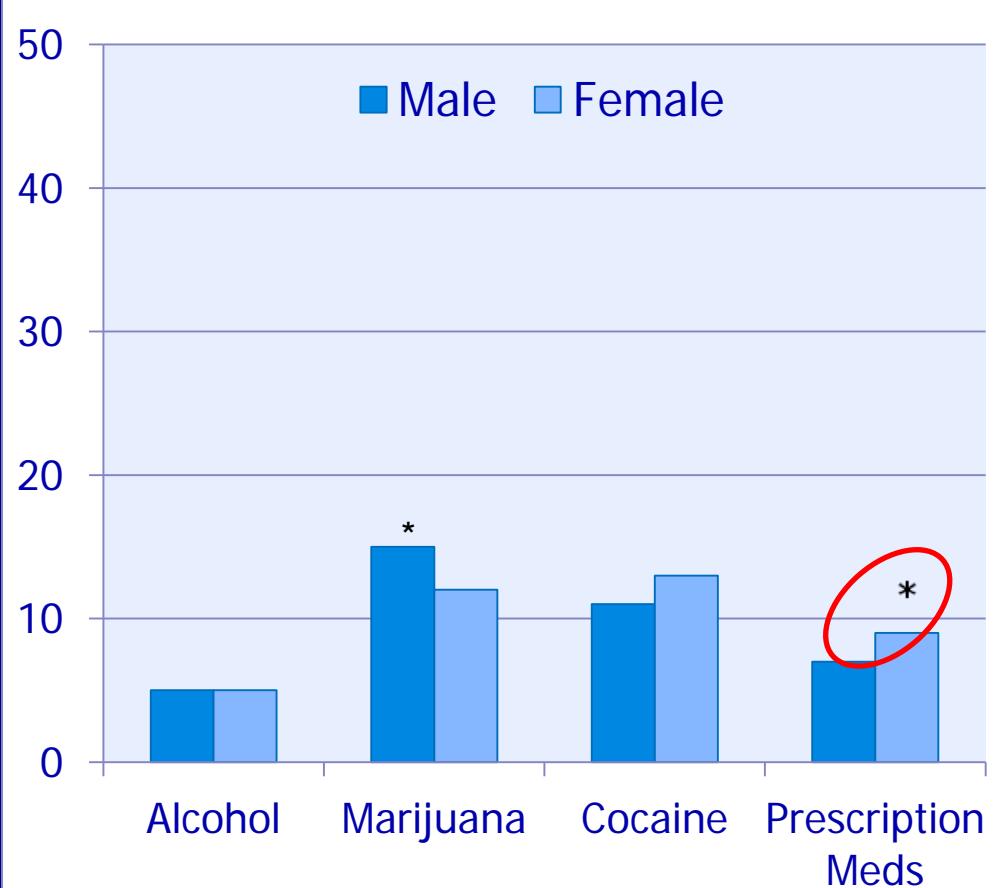
# Lifetime Prevalence of Drug Use Disorders in U.S. Population by Gender in NESARC



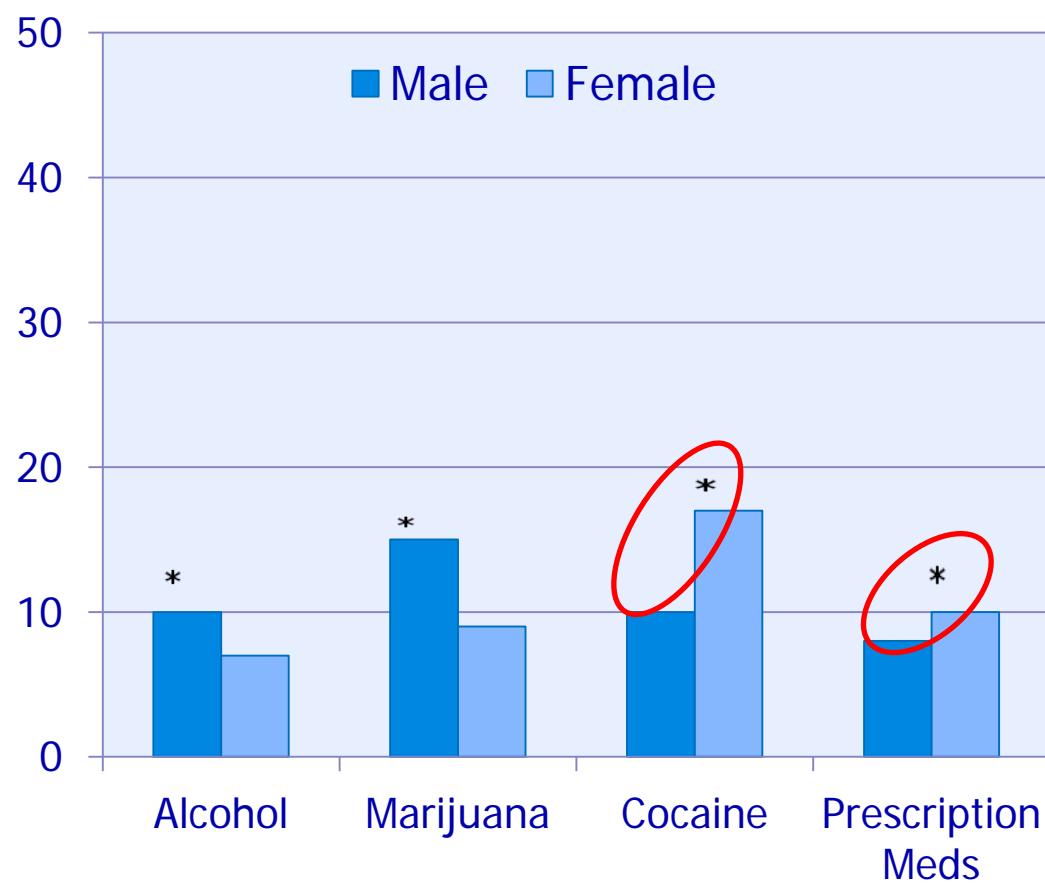
Includes both abuse and dependence based on DSM-IV criteria;  
Conway et al. (2006)

# Growing Differentiation in Type of SUD by Gender Among Adolescents and Young Adults With Any Use in NSDUH

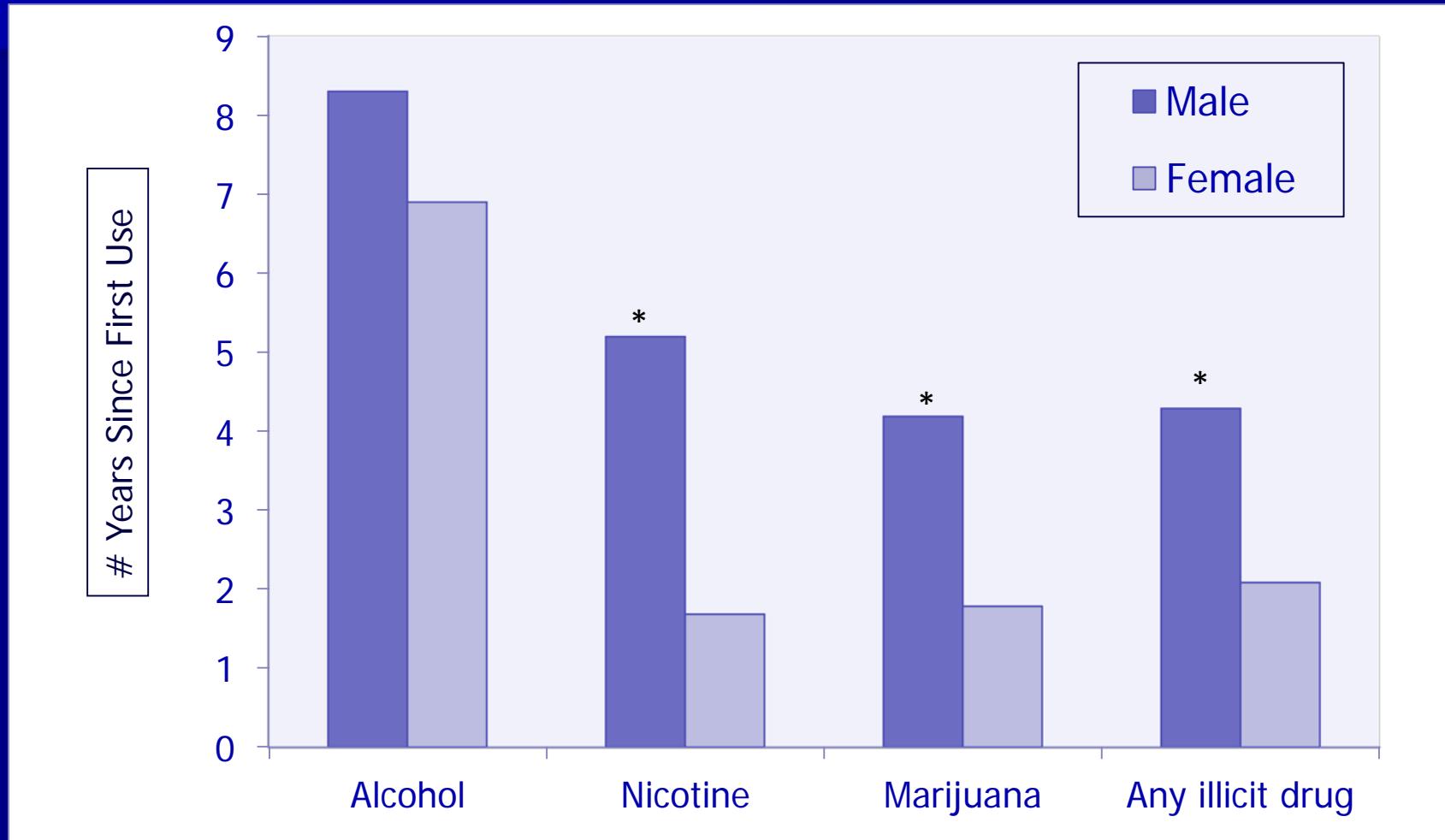
Ages 12 - 17



Ages 18 - 25



# Faster Progression from First Use to Disorder for Girls Relative to Boys with SUD by Age 16



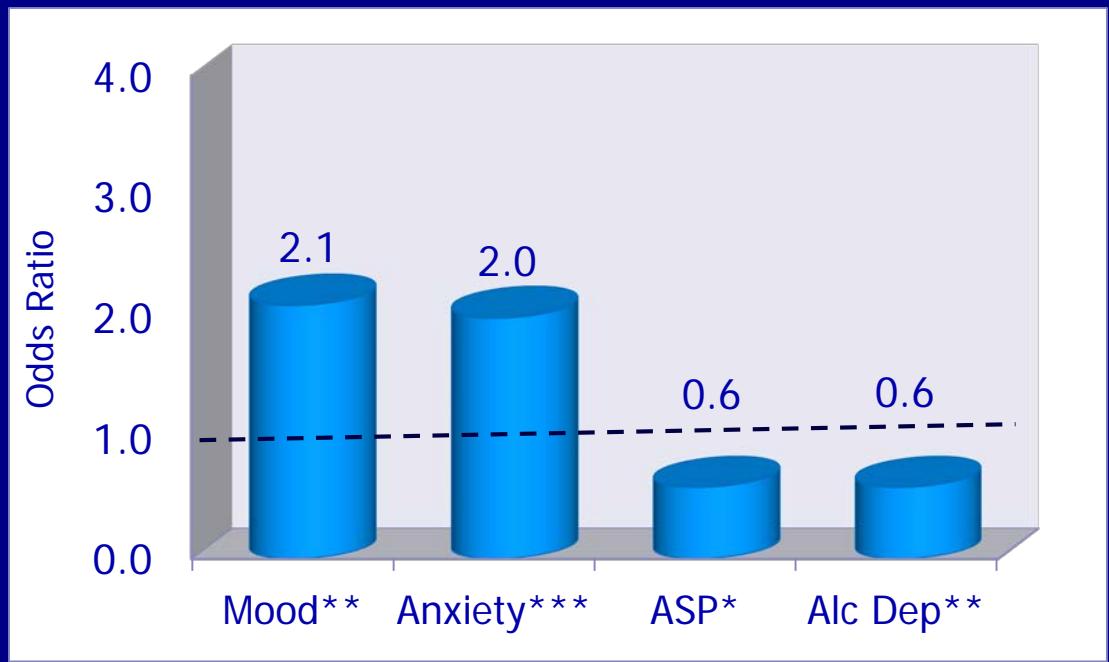
Source: Costello et al. (1999). *JCCP*, 28, 298-311.

**Comorbid Psychopathology is  
More Prognostic of SUD among  
Females**

# Gender and Comorbidity

- Comorbidity of SUD and mental disorders is well established
- Magnitude of comorbidity tends to be greater for females, particularly at lower levels of severity of substance use
- Differences in temporal ordering of onset:
  - ▶ Women: depression → alcohol disorder
  - ▶ Men: alcohol disorder → depression
- Stronger association between internalizing & externalizing symptoms with severity of alcohol dep (e.g., symptoms, consumption) among women (Dawson et al., 2010)

# Comorbidity of Substance Use and Mental Disorders Among Opioid Users in NESARC



- Women opioid users are twice as likely as men to have mood or anxiety disorders
- But women are less likely to have antisocial personality disorder or alcohol dependence.

ORs: women = 1, men = 0; \*  $p < .05$ , \*\*  $p < .01$ ; \*\*\*  $p < .001$

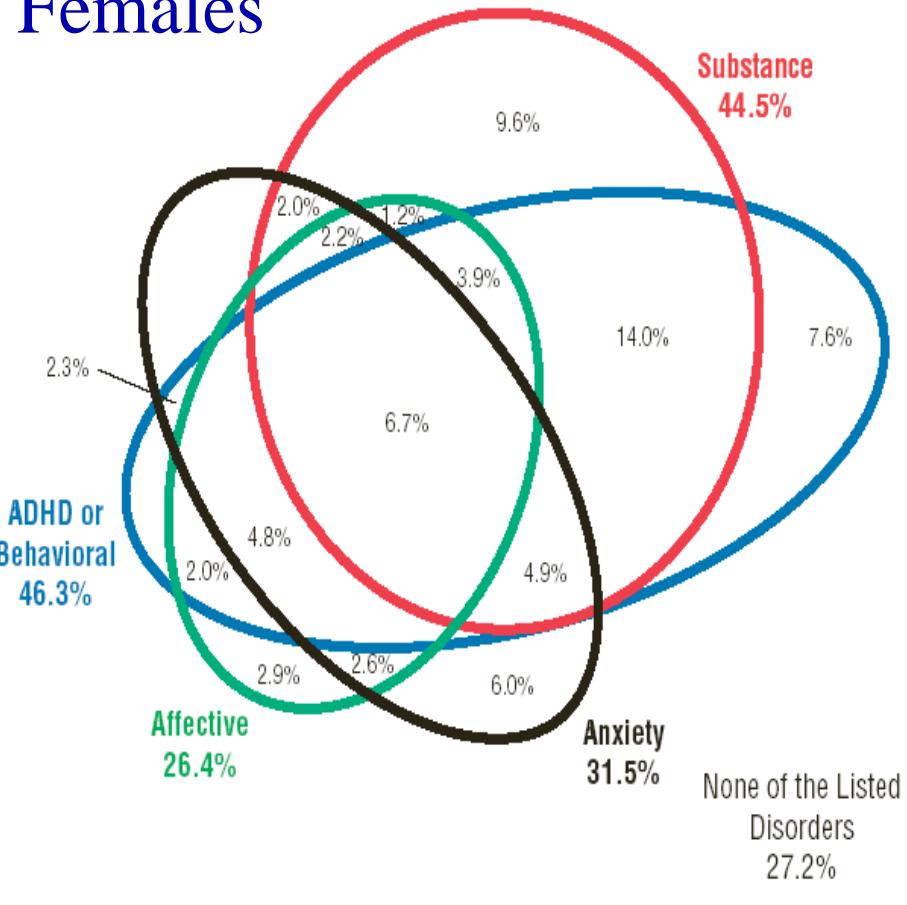
Mood disorders: major depression, dysthymia, manic disorder and hypomanic;

Anxiety disorders: panic, social, specific, generalized anxiety disorder

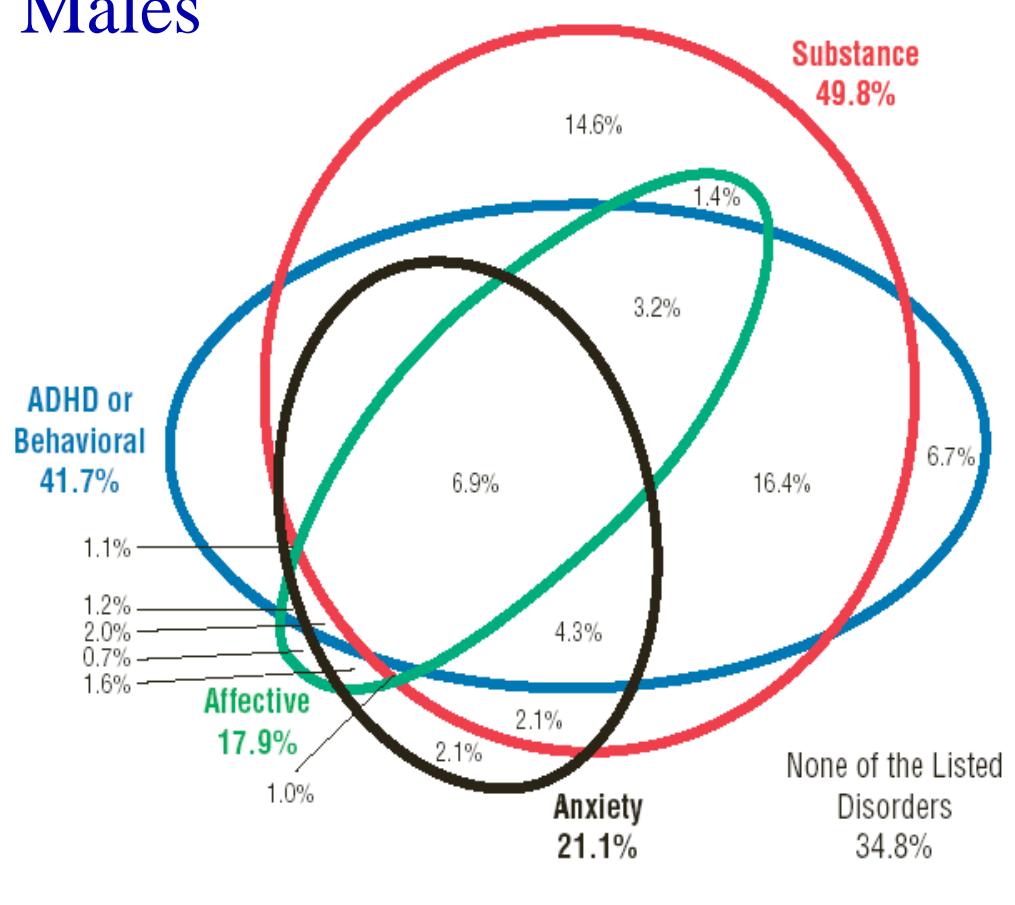
Source: Grella et al. (2009)

# Comorbid Types among Juvenile Detainees: Cook County, IL

Females

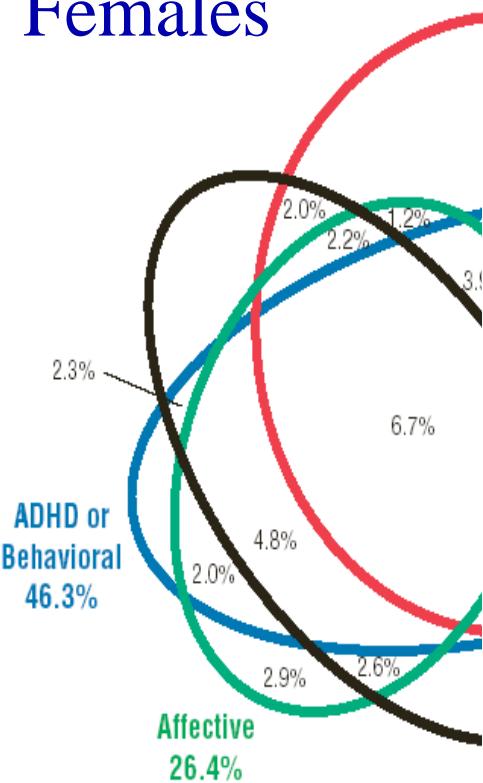


Males



# Comorbid Types among Juvenile Detainees: Cook County, IL

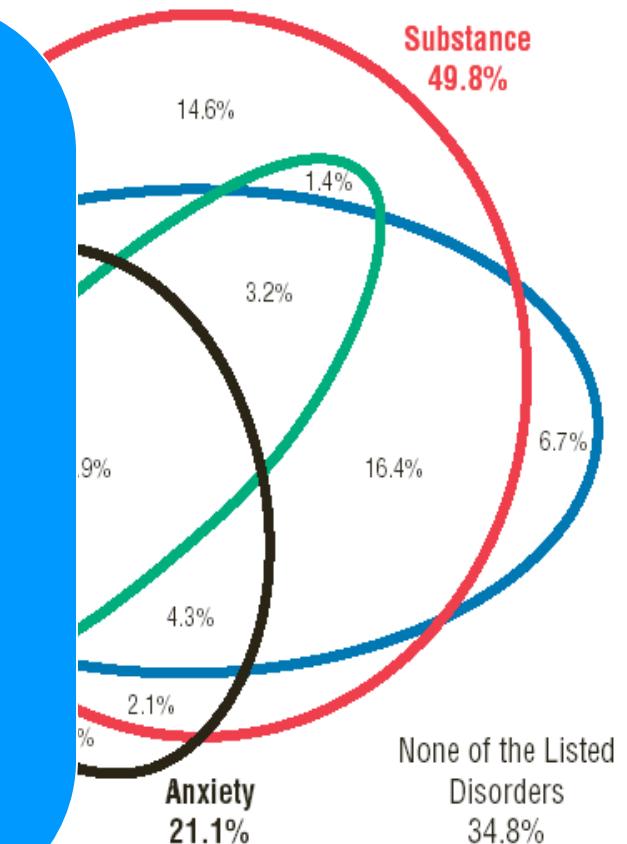
## Females



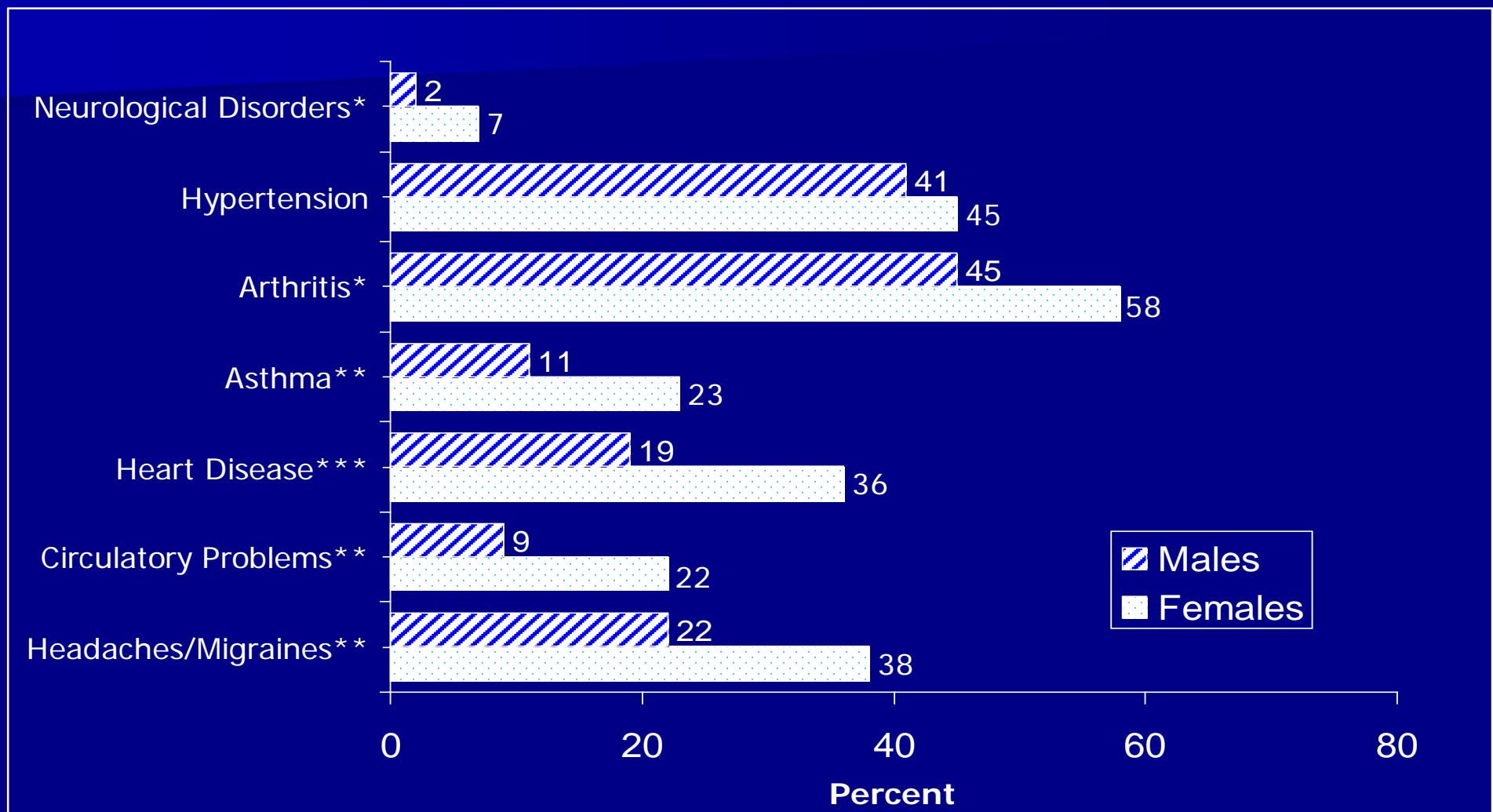
## Males

- A recent 5-year follow-up showed that prevalence of most psychiatric disorders decreased over time, but there was continuing higher prevalence of affective disorders among females and substance use disorders among males.
- Substance use and disruptive disorders were most persistent over time – particularly among males

Abram et al. (2015). *JAMA Psychiatry*

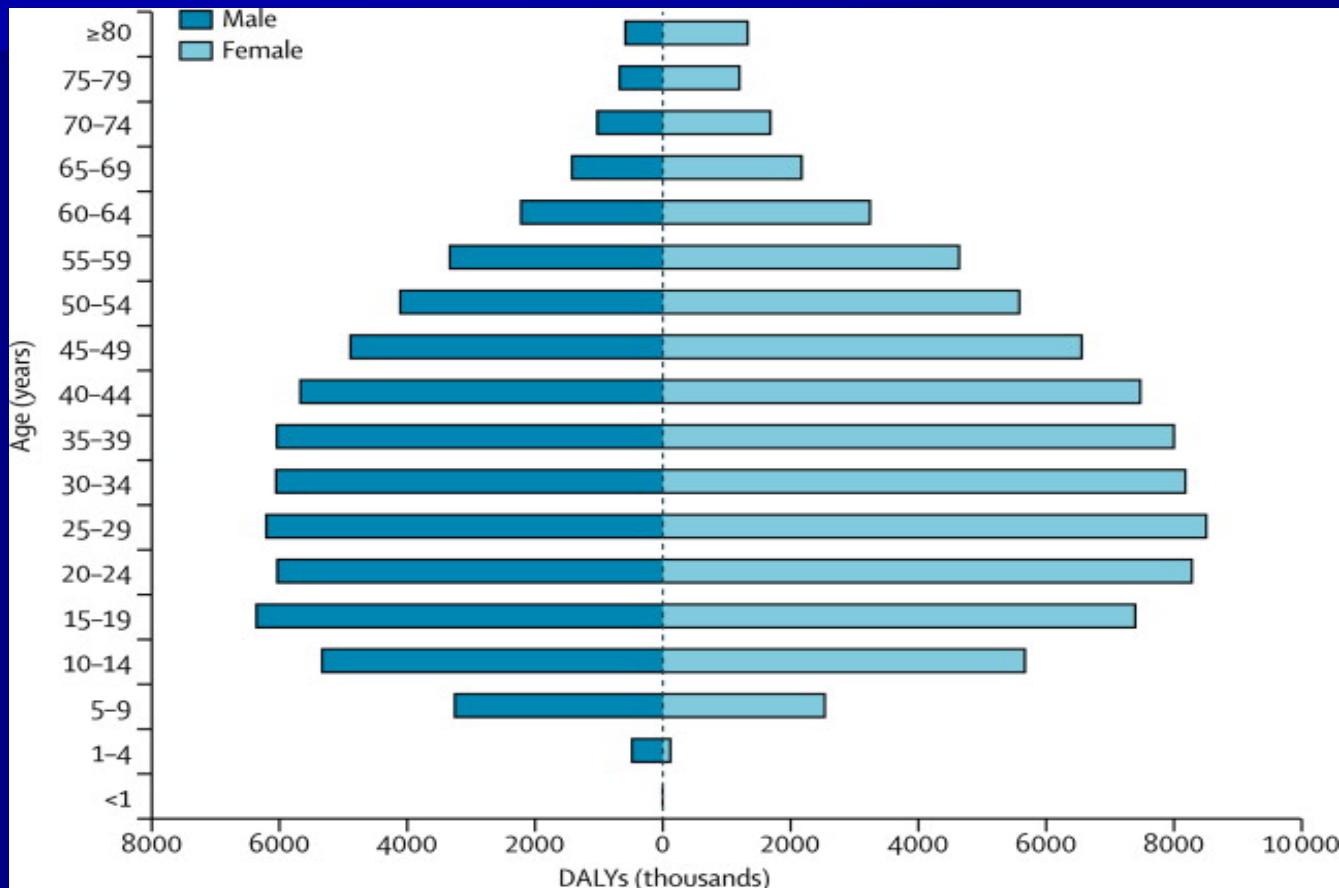


# Gender Differences in Chronic Health Problems in a Cohort of Opiate Users



Average age at follow-up interview: 58.8 for males, 54.9 for females;  $p < .05$ ,  $**p < .01$ ,  $***p < .001$ ;  
Grella, C.E., & Lovinger, K. (2012). *Addictive Behaviors*, 37(3), 306-212.

# Global Burden of Disease: Disability-Adjusted Life Years (DALYs) for all Mental Disorders and SUD by Age and Sex

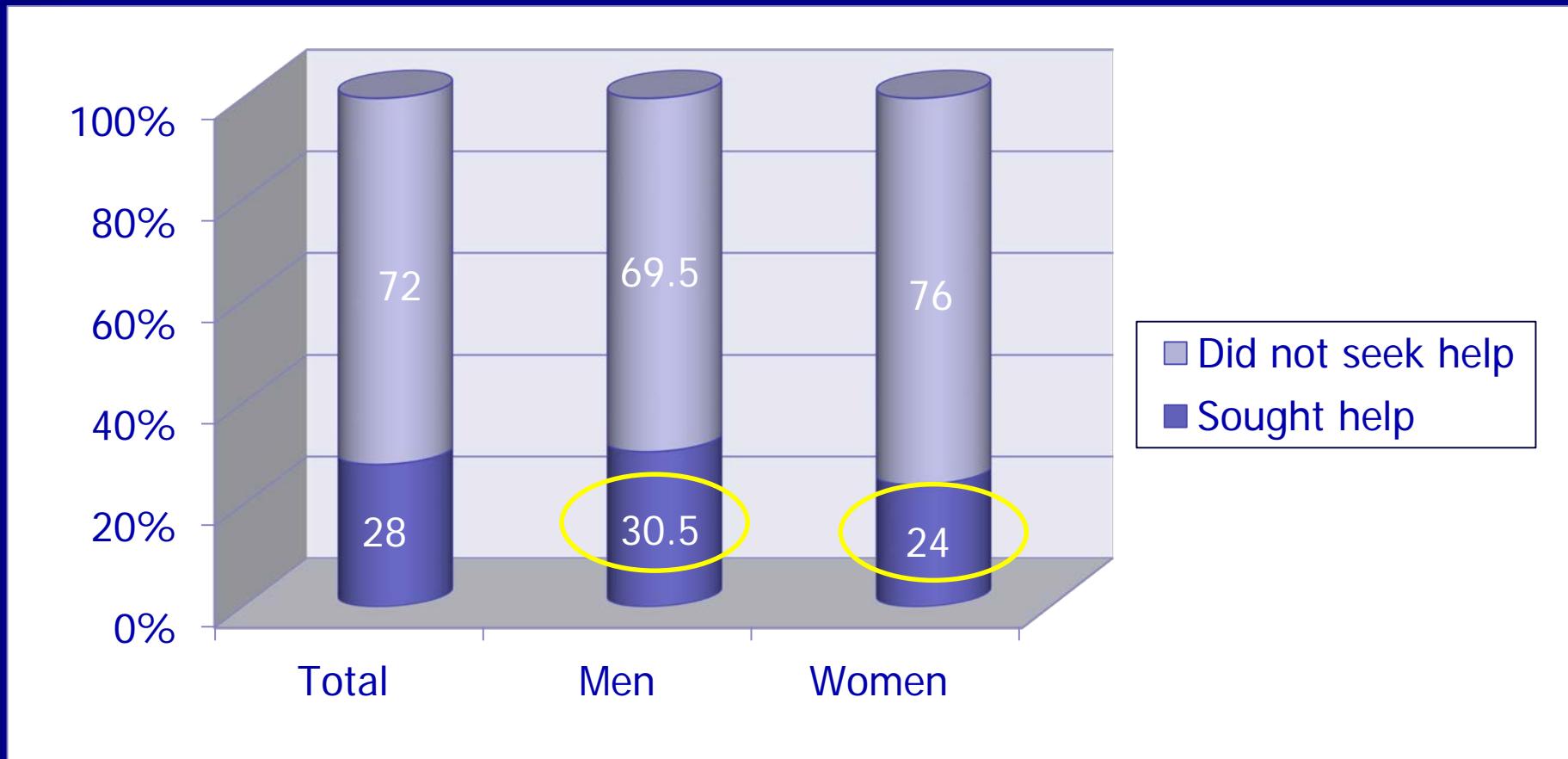


- Boys < age 10 had greater proportion of burden than girls of equivalent age, accounted for by childhood behavioral disorders
- Over age 10, girls & women had greater burden from mental disorders than boys, whereas men have greater burden than women for SUD across all ages
- Depression & anxiety disorders are most prevalent

Whiteford et al. (2013). Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010, *The Lancet*, 382, 1575-1586.

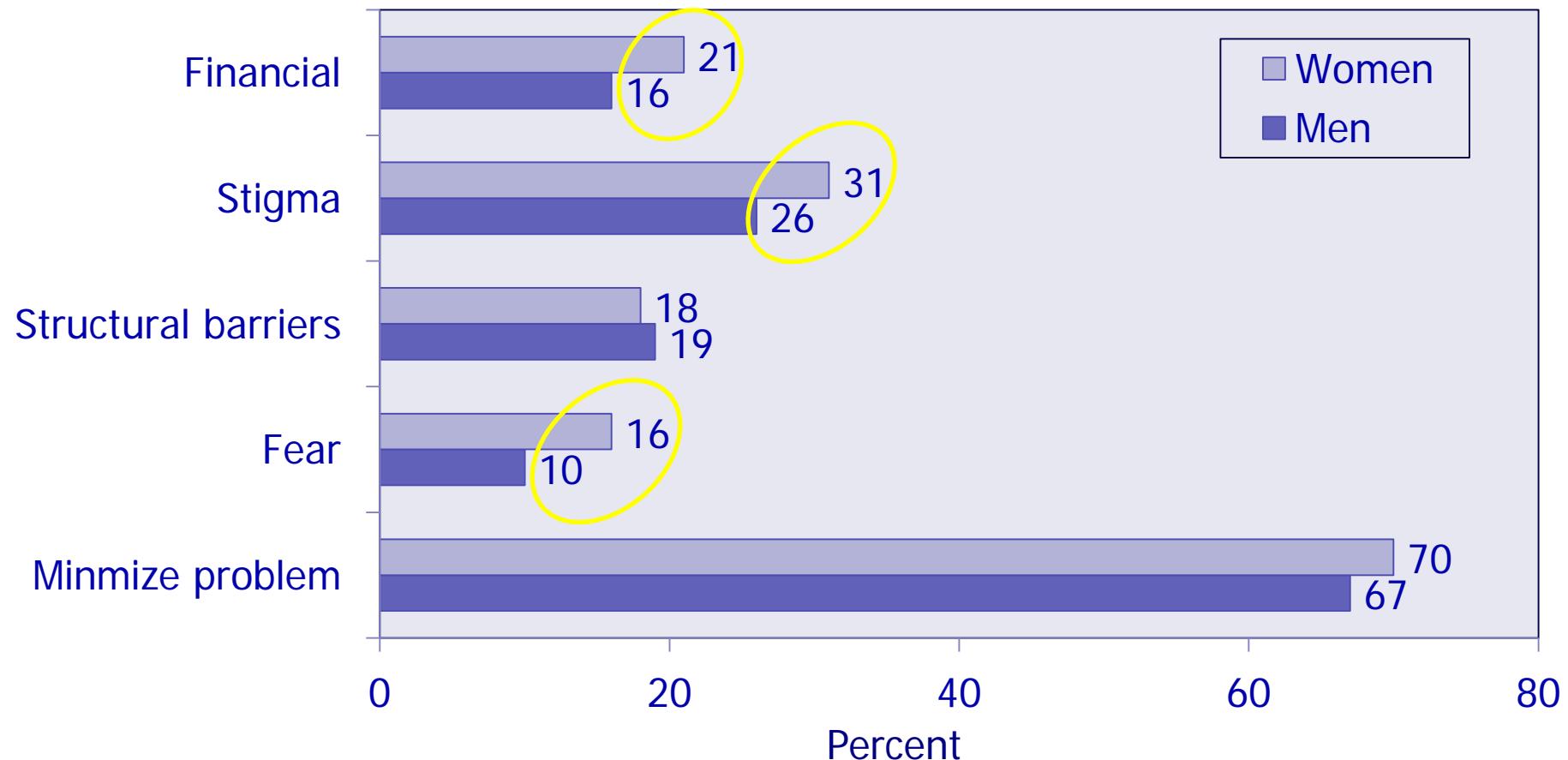
# Disparities in SUD Treatment Access and Utilization

# Women with SUD Have Lower Rates of Help-seeking and Tend to Enter Treatment at Higher Levels of Severity



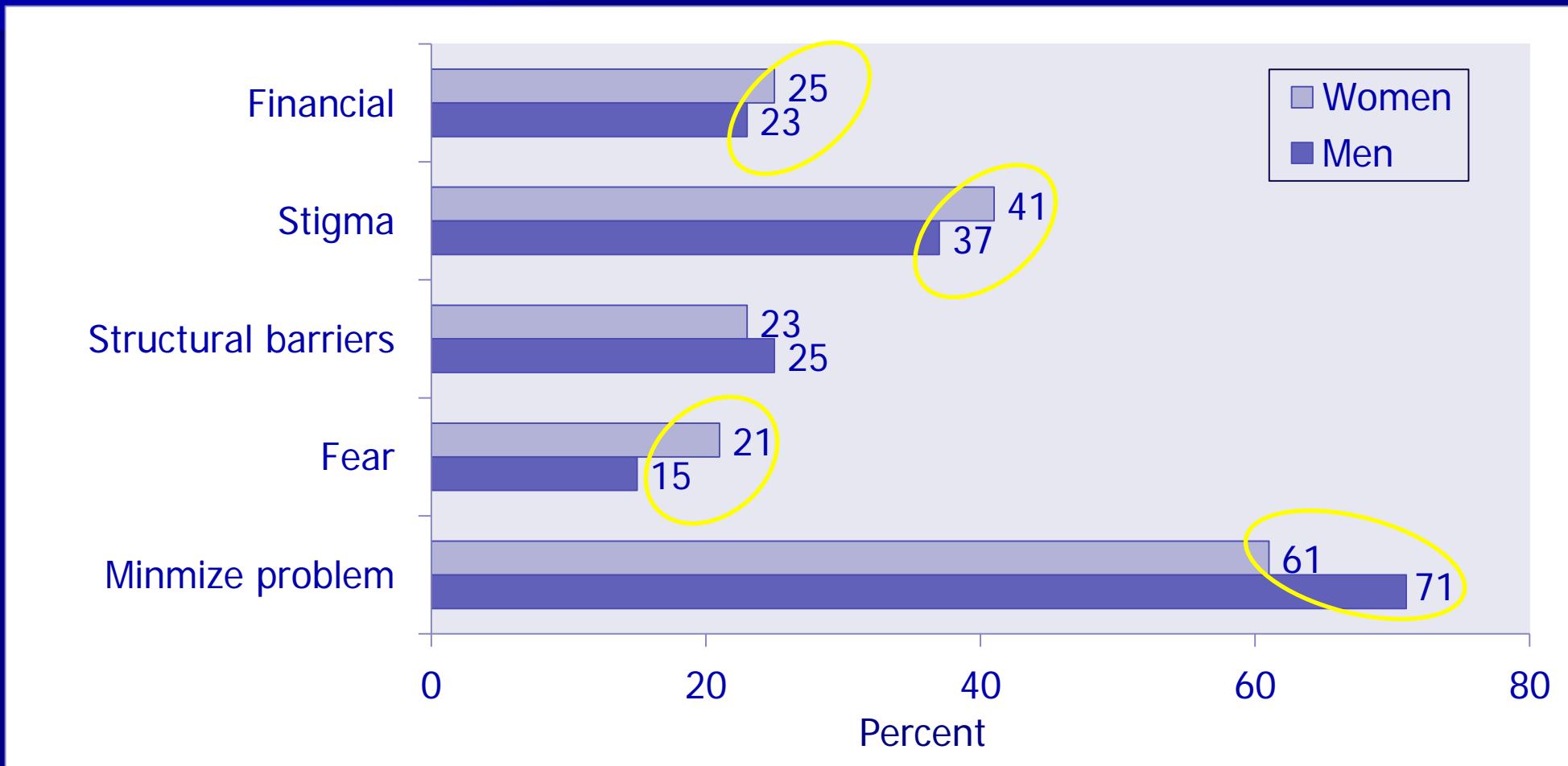
Source: NESARC baseline sample with past-year alcohol or other drug dependence; N = 1,262; p < .001  
Grella & Stein, 2013

# Reasons for Not Seeking Help for Alcohol Problems by Gender in NESARC



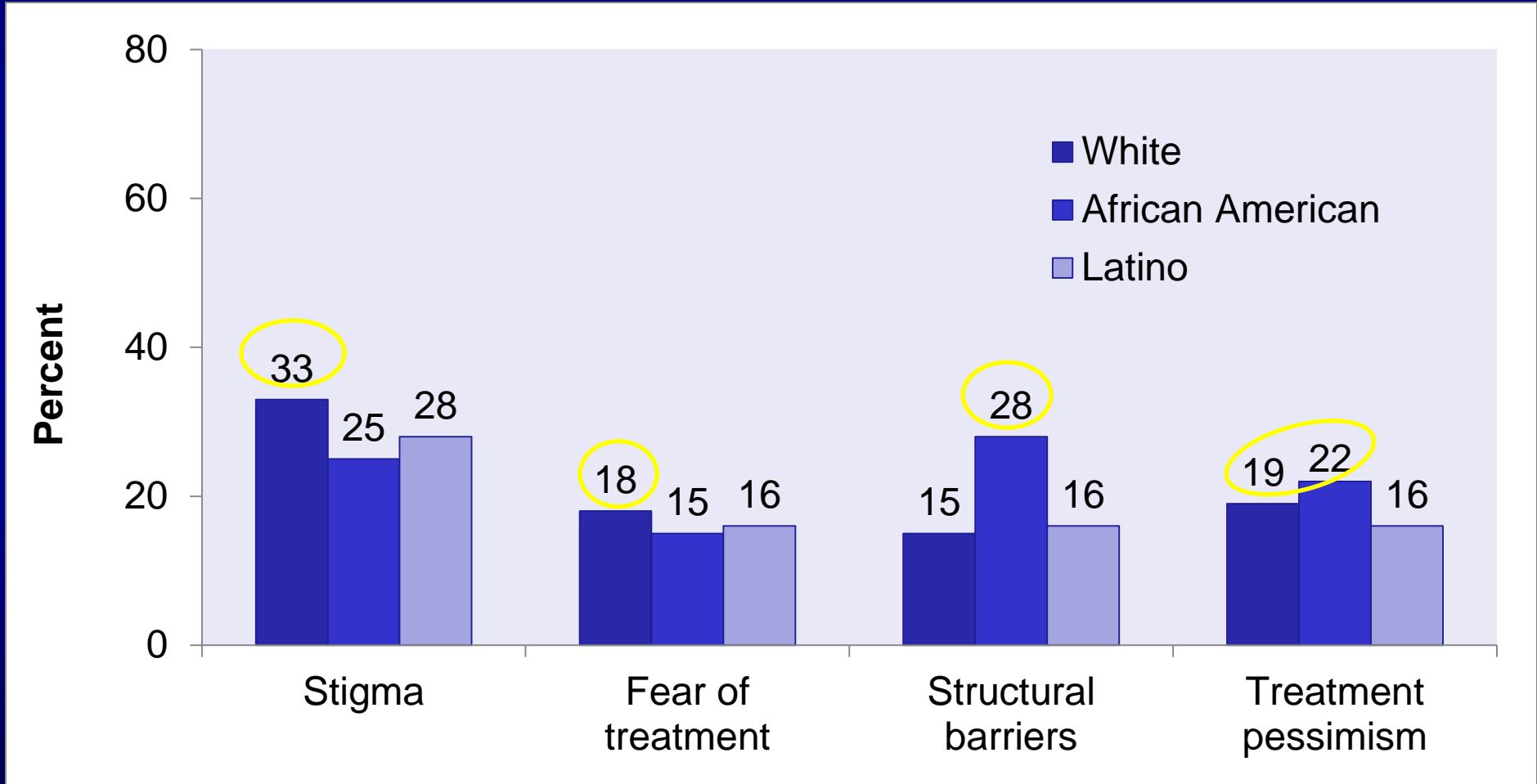
Source: Otiniano Verissimo & Grella, 2017;  $p < .05$  for indicated variables

# Reasons for Not Seeking Help for Drug Problems by Gender in NESARC



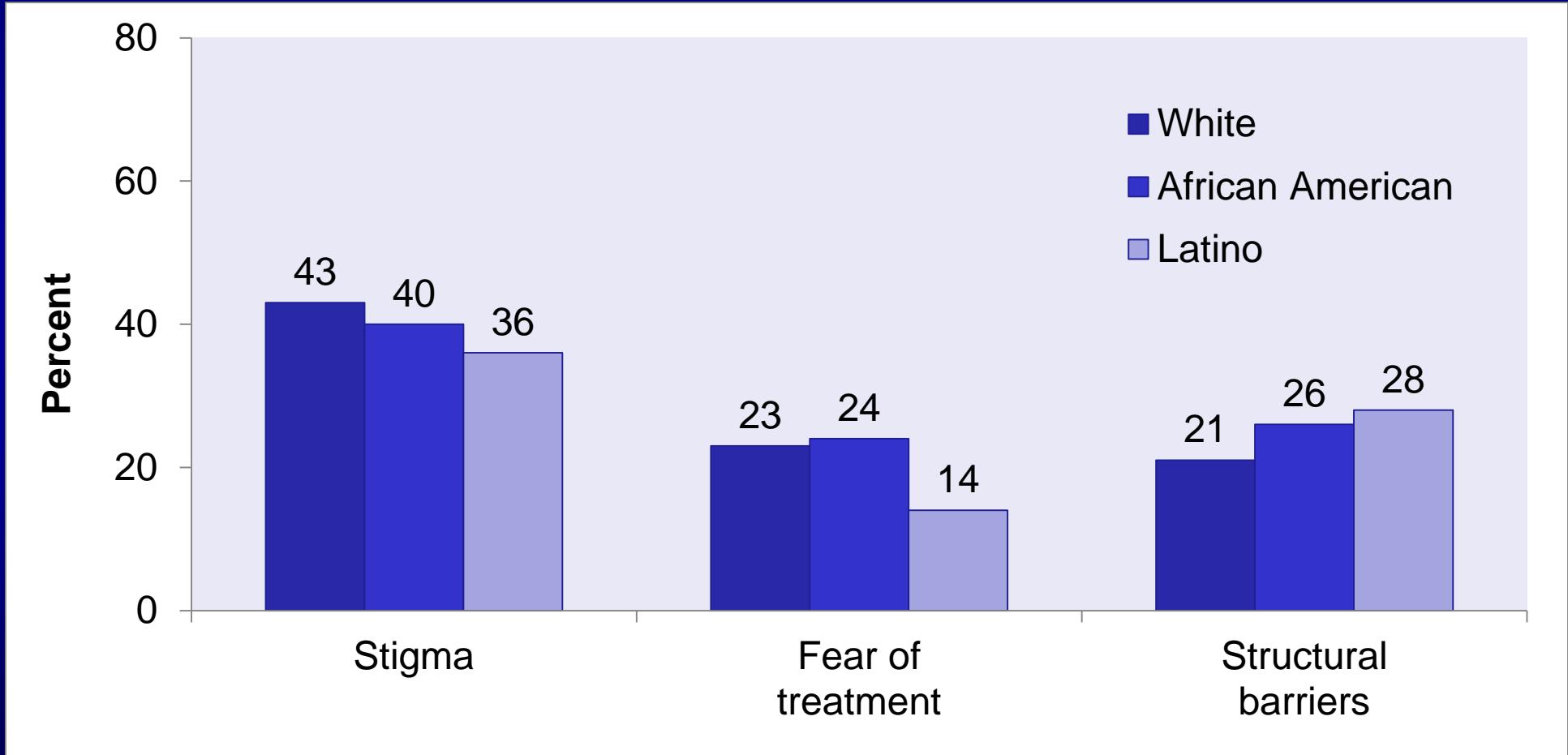
Source: Otiniano Verissimo & Grella, 2017 p< .05 for indicated variables

# Reasons for Not Seeking Help Among Women with Alcohol Problems by Race/Ethnicity



Source: NESARC Wave I sample; interactions of gender x ethnicity significant at  $p < .05$  controlling for socio-demographics; Otiniano & Grella, 2017

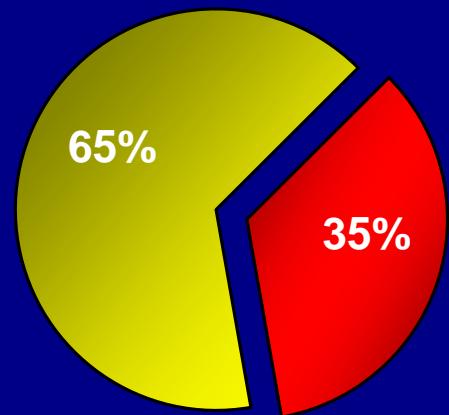
# Reasons for Not Seeking Help Among Women with Drug Problems by Race/Ethnicity



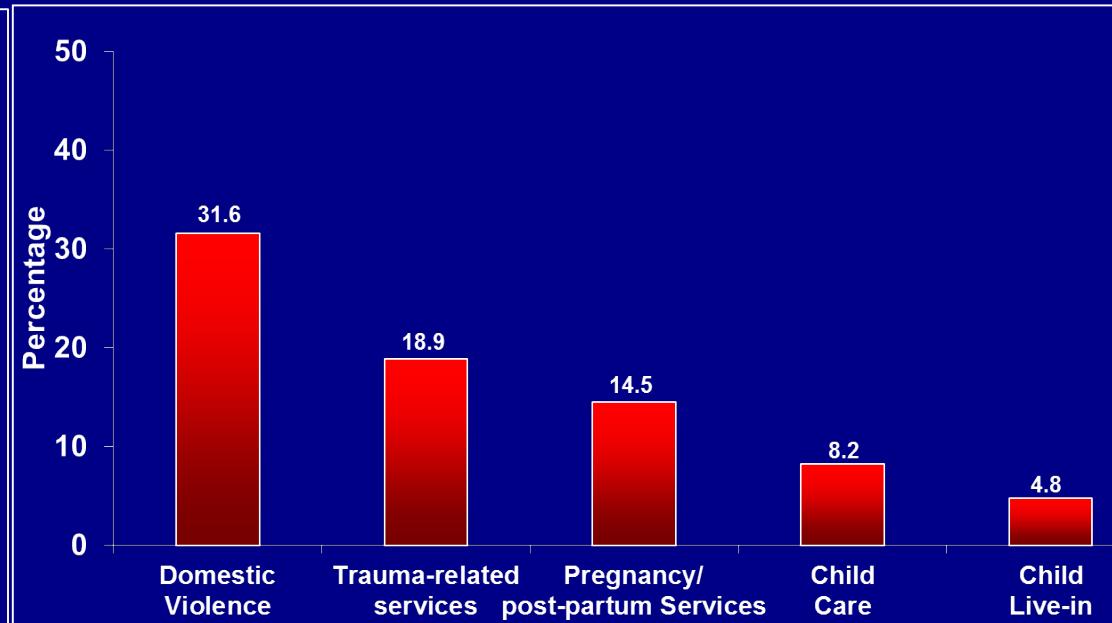
Source: NESARC Wave I sample; interactions of gender x ethnicity significant at  $p < .05$  controlling for socio-demographic and severity; Grella & Otiniano, manuscript in preparation

# **Gender-Specific SUD Treatment Programs and Services**

# SUD Treatment Facilities that Provide Special Services or Programs for Women and Types of Services Provided



N = 7,990 facilities providing SUD treatment services



Source: SAMHSA, National Survey of Substance Abuse Treatment Services (N-SSATS), 2012

# Women-only SUD Programs

- Typically provide more services that women need related to mental health, domestic violence & trauma exposure, child welfare & parenting.
- Women in these programs tend to have more severe problems than those in mixed-gender programs.
- Yet, relative to mixed-gender programs, women-only residential programs are associated with:
  - ▶ longer treatment retention
  - ▶ better outcomes regarding drug use, criminal behavior, incarceration, & family reunification

# Summary of Main Points

1. Sex differences are evident in neurobiology of psychoactive substance use and addiction, epidemiology, & disease progression.
2. Males have higher rates of alcohol and drug use, but sex differences in types of substances used beginning in adolescence and increasing over time.
3. Patterns of male and female drug use at population-level are converging over time, perhaps due to lessened gender role differentiation.
4. Females display more comorbidity of SUD and MH disorders, beginning in adolescence.
5. Comorbid psychopathology, especially behavioral disorders, are more prognostic of alcohol and drug dependence among females.

# Summary of Main Points

6. Women have greater exposures to trauma (both as children and adults), which heightens risk for SUD, MH disorders, & associated health problems.
7. Overall burden of disease related to MH & SUD is greater among women due to higher prevalence and persistence of mental health disorders (depression & anxiety) and comorbidity of these disorders with physical health problems
8. With regard to treatment, women:
  - ▶ have lower rates of treatment for SUD, but higher use of mental health services
  - ▶ report different barriers to accessing SUD treatment related to stigma, fear, & financial problems, which also vary by race/ethnicity
  - ▶ show more favorable outcomes in women-only programs which typically provide more services to meet their needs