



Mountain Plains ATTC (HHS Region 8)

**ATTC**

Addiction Technology Transfer Center Network  
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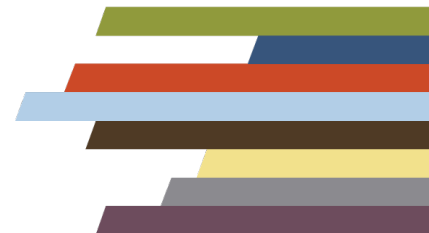
# Healthy Steps to Freedom: Enhancing Treatment/Recovery Services for Women Introductory Webinar

February 27, 2020



*Anne R. Lindsay, PhD*

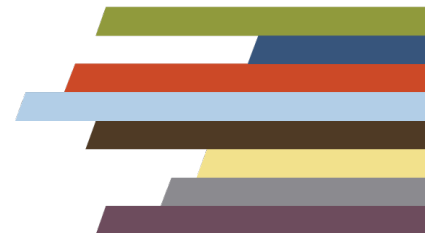
*University of Nevada, Reno Extension*



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# Opioids Overdose Deaths

## *Young* Women

Location	0-24	25-34	35-44	45-54	55+
United States	10%	26%	23%	23%	19%

*National Vital Statistics System, Kaiser Family Foundation*

- Highest in **15-44 year old** women in the south
- The highest rate of opioid-related emergency room visits was among those **aged 25-44 years**

# *Older* Women >65

- Nearly 1/3 older women reported Rx opioid and/or hazardous alcohol use in past 30 days
- 23% older women take at least 5 Rx drugs
- Middle-aged and older women have significant **exposure to medical professionals** who prescribe opioids

OWH

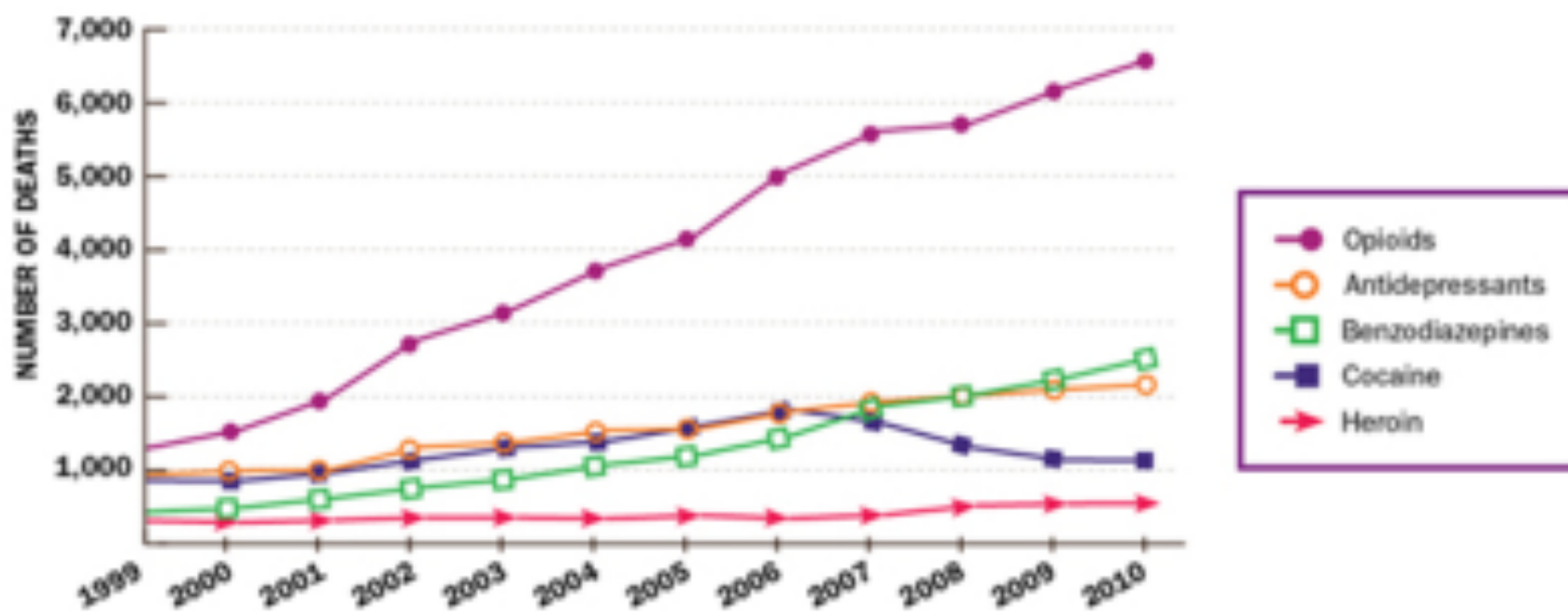
# Opioids Overdose Deaths by Gender (**Females**)

Location	Male	Female
United States	65%	35%
Idaho	53%	47%
Kansas	51%	49%
Nevada	54%	46%
Oklahoma	53%	47%
Wyoming	48%	52%

*National Vital Statistics System, Kaiser Family Foundation*

# Opioid Deaths Increase in Women

## 1999-2010

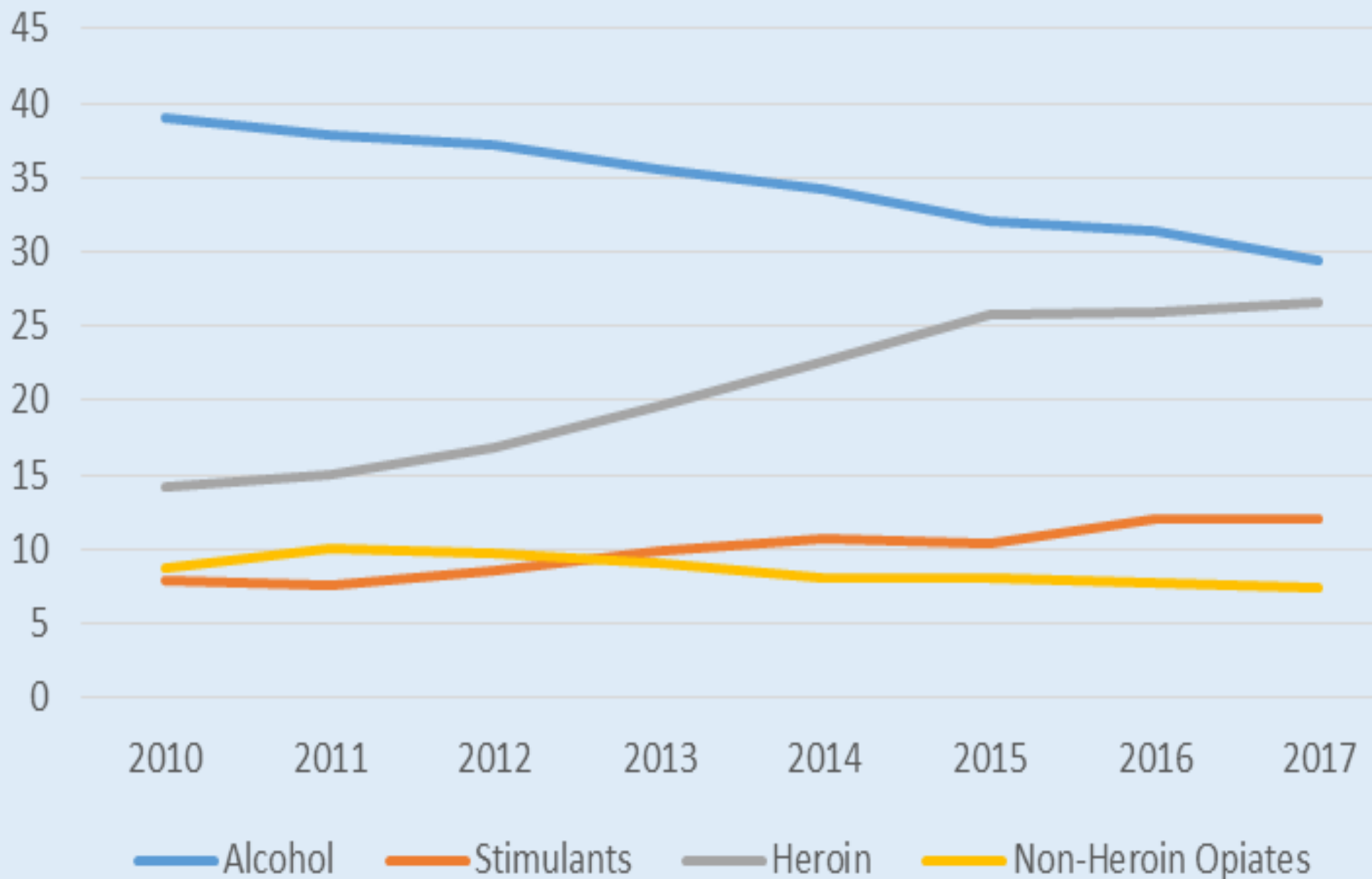


SOURCE: National Vital Statistics System, 1999-2010 (deaths include suicides)

**Prevalence of Rx Opioid, Heroin and Illicit  
Synthetic Opioid Use Increase in Females  
1999-2015**

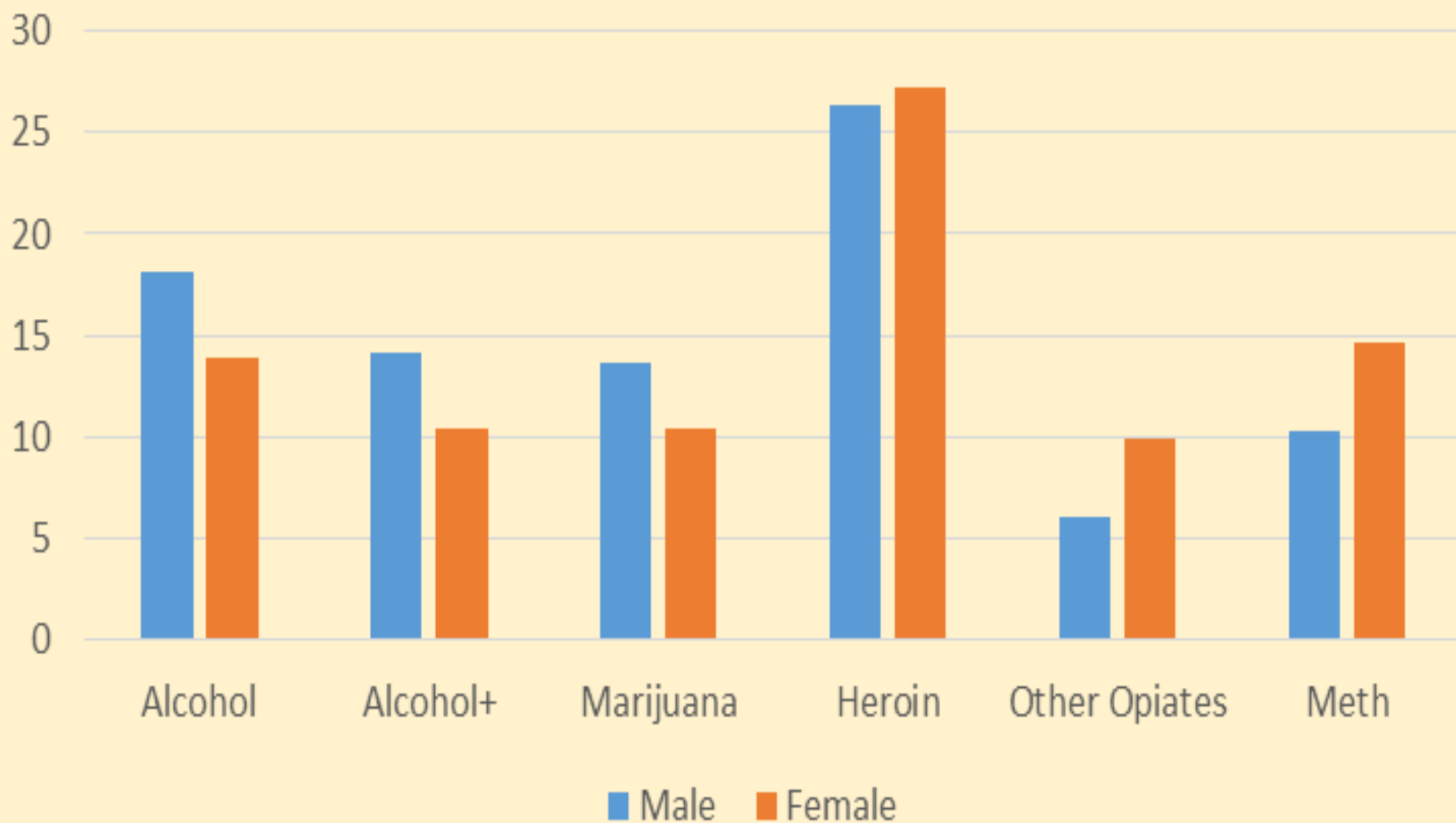
- **Rate of deaths  
from Rx opioid  
use increased**

## Admissions by Primary Substance Use (U.S.)





# Admissions by Primary Substance Use (U.S.) Gender; 2017



# Sex and Gender

- *Sex differences* result from biological factors, such as sex chromosomes and hormones
- *Gender differences* are based on culturally defined roles for men and women, as well as those who do not identify with either category. Gender roles influence how people perceive themselves and how they interact with others

# Sex Differences

What are some major sex differences between men and women?

# Gender Differences

What are some common gender differences generally observed between men and women?

## As an example:

- ***Sex Difference:*** Women have a harder time quitting smoking than men do. Women metabolize nicotine, the active ingredient in tobacco, faster than men. Differences in metabolism may help explain why nicotine replacement therapies, like patches and gum, work better in men than in women. Men appear to be more sensitive to nicotine's pharmacologic effects related

# Sex/Gender & SUD's

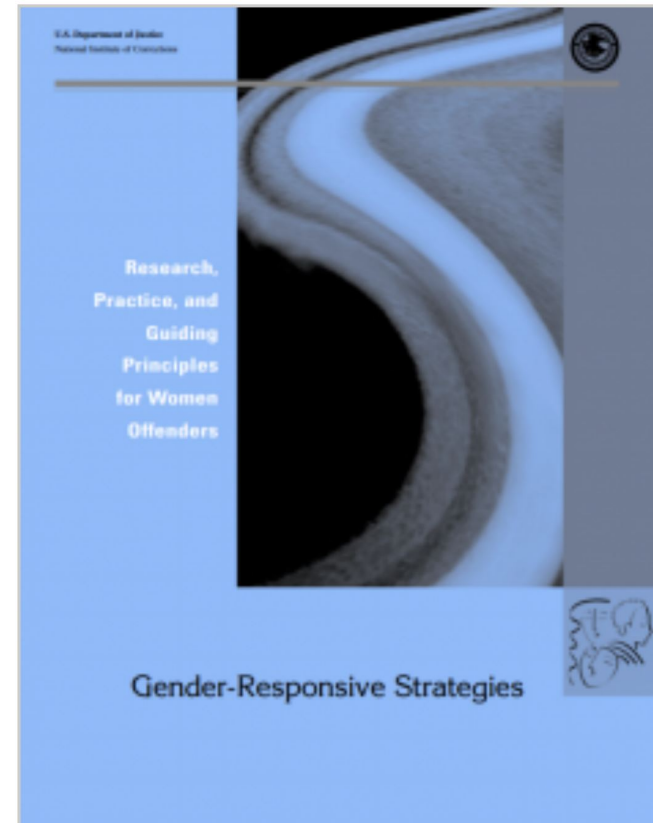
How might sex/gender impact a person's involvement in substance abuse treatment or correctional setting?

# Gender-Responsive

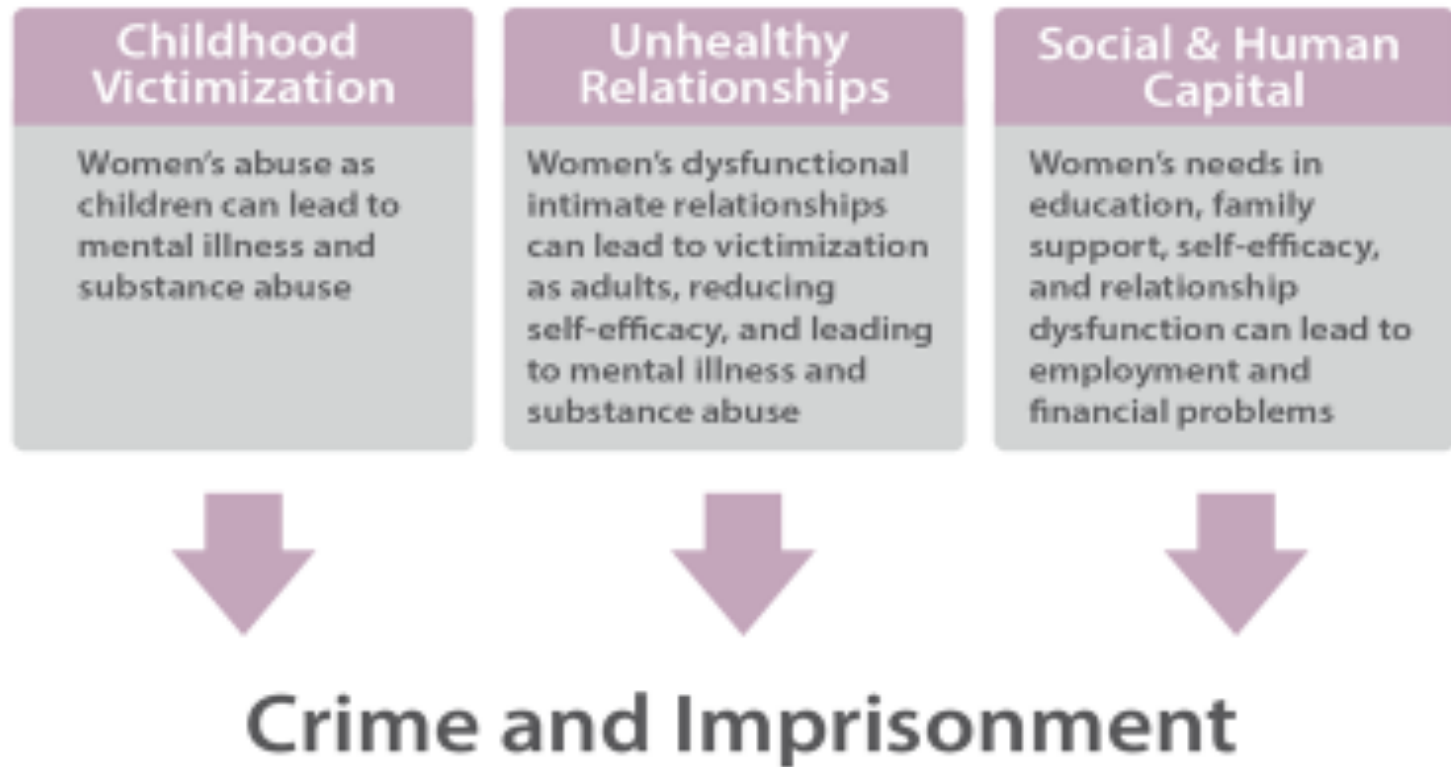
Considers gender norms, roles and inequalities and takes measures to address them - *WHO*

“Gender-responsive means creating an environment . . . that reflects an understanding of the realities of women’s lives and addresses the issues of the women.” Gender-responsive *practice* can improve outcomes for women offenders by considering their **histories, behaviors, and life circumstances.**

*Bloom, Owen & Covington, 2003*



# Women's Pathway to System Involvement



Salisbury & Van Voorhis (2009)



# Childhood Victimization

## Adverse Childhood Experiences

- *Physical and sexual abuse*
- *Emotional abuse*
- *Neglect*
- *SUD's among family members*
- *Mental illness in the home*
- *Separation/divorce of parents*
- *Incarcerated household member*
- *Having a mother who was treated violently*

# Women & Trauma

- Individuals who have experienced **childhood trauma are 1.2 to 1.5 times more likely to engage in substance abuse** (Wu et al., 2010)
- A research review by found that a lifetime history of trauma (mostly childhood occurrence) was **found in 55% to 99% of women who misused substances,** compared with rates of 36% to 51% in the general population (Najavits et al)

# Sexual Abuse

- Rates of both *childhood* and *adult* sexual abuse are **higher among women** than among men
- A history of traumatic childhood events, such as physical or sexual abuse and domestic violence, has also been **associated with the initiation of SUD's** among women  
(Dube et al, 2003; Douglas et al, 2010)
- Compared to men, a higher proportion of women with SUD's have histories of trauma, including sexual and/or physical abuse - often **perpetrated by people the women knew and trusted**

# Unhealthy Relationships

- Women likely to be introduced to substances by an intimate partner (men by a peer)
- More likely to initiate hazardous drug use in the context of some type of intimate partner relationship (esp after introduced by partner)

# Domestic Violence

- **> 1:3 women have experienced physical violence** at the hands of an intimate partner
- **Victims of violence are at increased risk of chronic health conditions**, including obesity, chronic pain, depression, and substance use WHO
- **African-American and American Indian/Alaska Native women** are more likely than women of other racial and ethnic groups to be victims of rape, physical violence, and stalking by an intimate partner in their lifetime

# Social & Human Capital

- Lower incomes
- Unemployed
- Less education
- Lower socioeconomic status
- Higher overall health consequences from harmful drug use
- Women of reproductive age

# Co-Occuring Disorders Women more

- **Major depression** - nearly **twice** as likely to suffer from major depression as men (Owen, 2009)  
**likely to suffer from**
- **Anxiety** - rates of anxiety are **two to three times higher** in women than men. (OWH, 2009)
- **PTSD** - women are **two to three times more likely to** have PTSD than men (Kesler et al., 2005)
- **Eating disorders** – women suffer from **BN 10:1** compared to men, and **ED 4:1** (NEDA)

# **Co-Occurring MH & SUD Disorders**

- **60-75% of system-impacted women have co-occurring disorders** (McKee & Hilton, 2017; Scott et al., 2015)
- **Anxiety disorders and major depression** are typically the most common
- Also very common comorbidities with **PTSD** and **eating disorders**



**BIOHAZARD**



**USE UNIVERSAL  
PRECAUTIONS**

**TRAUMA**



**USE UNIVERSAL  
PRECAUTIONS**

**“First Do No Harm”**

# Women & SUD's

- Women and men use drugs for different reasons
- Women respond to drugs differently (SUD's can manifest differently in women than in men)

Women are more likely to:

- **Experience pain**, including chronic pain (more likely to report);
- **Self-medicate** (physical, stress, anxiety)
- **Experience cravings**
- **Relapse**

# Reproductive Age

- Some of the unique issues women who use drugs face are relate to their reproductive cycles.
- Women with SUDs can have issues related to **hormones, menstrual cycle, fertility, pregnancy, breastfeeding, and menopause**
- **Increasing incidence of amphetamine and opioid use** among delivering women and associated adverse gestational outcomes (Admon, 2019)
- **Polysubstance use is highly prevalent** among reproductive-aged women reporting nonmedical opioid use (Jarlenski, 2017)

# Treatment Barriers (Social and Human Capital)

- Social or legal fears
- Child Care
- Work
- Home care and other family responsibilities

# Treatment Interventions

- Treatment programs should take these issues into consideration and offer **child care, job training, and parenting classes**
- Interventions should **address concurrent use of multiple substances** among reproductive-aged women
  - **Prenatal care may provide a vector** through which women can be connected to risk reduction interventions and gender-responsive treatment services addressing substance use and mental health needs (Brecht & Herbeck, 2014)



## Pregnant Prisoners

Consider the needs of pregnant women in correctional facilities and provide special privileges



Limited or non-use of restraints



Bottom bunk assignments and light work duty



Additional snacks/milk to meet their nutritional needs



Ongoing obstetric appointments, prenatal vitamins, social support and counselling, birth education, and transportation to and from the hospital

[Improving Health Care for Incarcerated Women](#), National Resource Center on Justice Involved Women, 2015  
[National Task Force on the Use of Restraints with Pregnant Women under Correctional Custody](#), U.S. Department of Health and Human Services, 2012

*National Resource Center on Justice Involved Women, 2015*

# Opioids & Women

- **Psychological and emotional stress** (not found in men)
- **Biological** (weight, body fat, metabolic rate, energy, and hormone fluctuations)
- **Social pathways** (introduction by a partner or close “relationship” vs “peers” for males)
- **Past experiences** more common in



## Women are also more likely to:

- **Be prescribed opioids:**
  - highest rate in reproductive age 18-44
  - 1/4 privately insured women and 1/3 female Medicaid (CDC 2008-12 filled an opioid Rx)
  - middle class white women are more likely to be prescribed opioids than other races (physician bias that “assumes less risk”)
- **Engage in “doctor shopping”** (obtaining prescriptions from multiple prescribers)

# Gender Differences in Impacts of Rx *Opioid* and *Heroin* Use

- Women are more likely to experience chronic pain and use Rx opioid pain medications for **longer periods and in higher doses** Back et al (2011), SAMHSA, N-SSATS (2014)
- Women use **smaller amounts for a shorter period of time before become dependent** Back et al (2011), SAMHSA, N-SSATS (2014)
- **Substance use develops into addiction more quickly** in women than in men

# Stimulants & Women

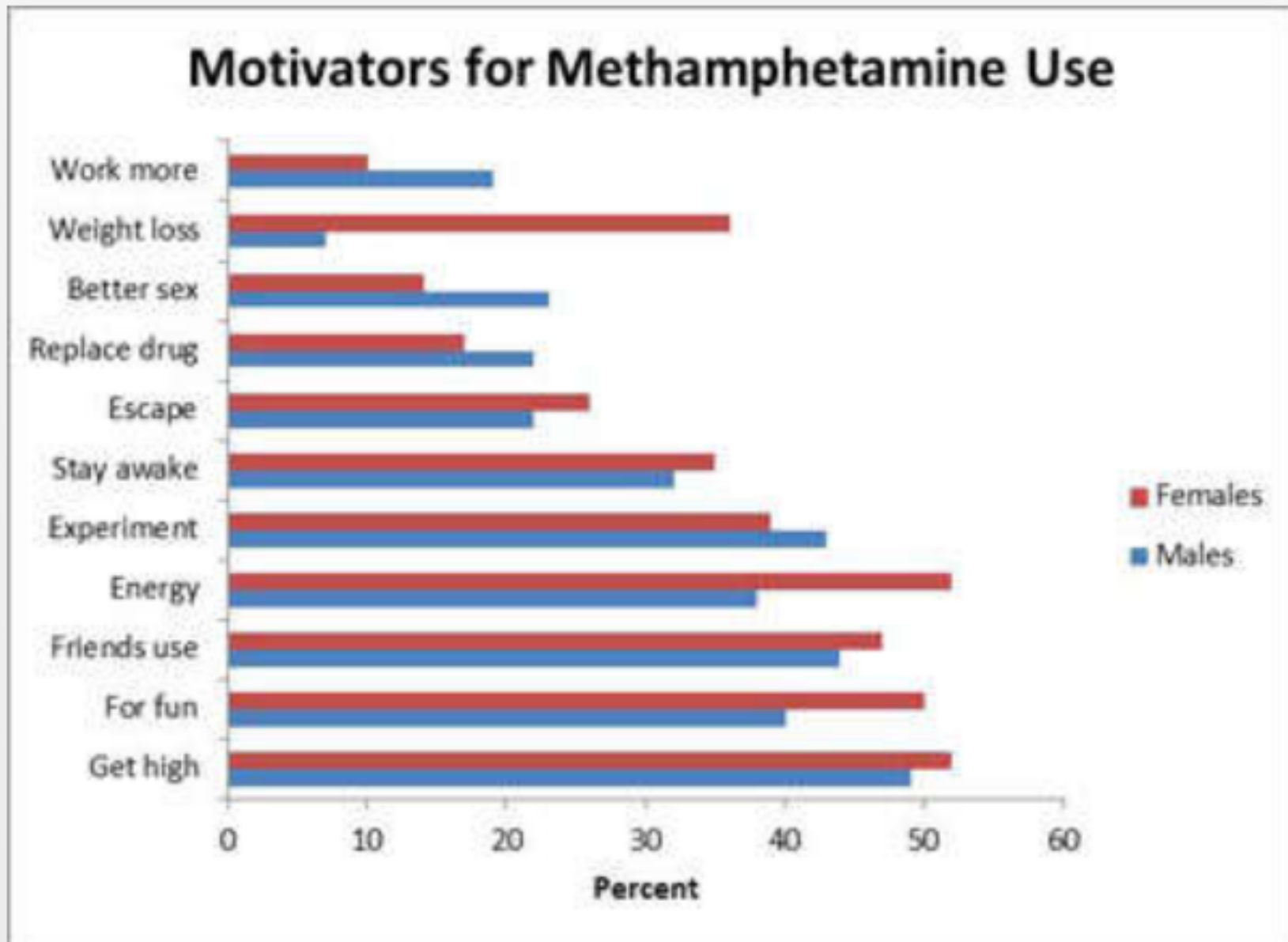
- Methamphetamine
- Cocaine
- Ecstasy
- Nicotine
- Prescription for ADD/ADHD or narcolepsy
  - Concerta ® (methylphenidate)
  - Ritalin ® (methylphenidate)
  - **Adderall** ® (amphetamine/dextroamphetamine)

# Why women use stimulants?

- Weight loss, loss of appetite & elevated metabolic functioning
- Increased energy, fight exhaustion
- Cope w/pain, self-treat mental health
- Elevated mood

*NIDA; Joe 1995; Joe 1996; Brecht, O'Brien et al. 2004; Parkes, Saewyc et al. 2008; Greenfield, Back et al. 2010*

# What Women Want!



Source: Brecht et al., 2004

# Methamphetamine & Women

- Linked to high rates of co-occurring **depression** in women
- Tend to begin **using methamphetamine at an earlier age** than do men, with female users typically **more dependent** on methamphetamine compared to male users.
- **Less likely to switch** to another drug when they lack access to methamphetamine
- **More receptive treatment** than men (methamphetamine & other substances)

# Cocaine & Women

- In animal studies, females are **quicker to start taking cocaine —and take it in larger amounts—** than males
- **More vulnerable to the reinforcing (rewarding) effects of stimulants** (estrogen increases sensitivity)
- **More sensitive than men to cocaine's effects on the heart and blood vessels**
- Female cocaine users are also less likely than male users to exhibit **abnormalities of blood flow in the brain's frontal regions** (sex-related mechanism may be protective factor)

# Adderall

- Used to treat ADHD
- Schedule II Drug
- High potential for abuse
- High potential for dependence
- Should be consumed only with a Rx



## **What I Wanted:**

- **More energy, less exhaustion**
- **Lose weight, look better**
- **Be social, more confidence**
- **Sex**
- **Rush & escape**
- **Freedom**

## **What I Got:**

- **Anxiety, heart/ metabolic disorders, insomnia**
- **Health problems**
- **Broken relationships & families**
- **STDs/unplanned pregnancies**
- **Loss of interest, depression**
- **Couldn't stop, addiction**

# **Gender-Responsive Strategies**

Research shows that gender-responsive assessment and treatment are **more effective at preventing recidivism and other crime-related outcomes** than those that are “gender-neutral.”

Gobeil, Blanchette, & Stewart, 2016; Salisbury et al., 2016



## Interact with women in a more gender-informed way

- ✓ Anticipate and explore reasons for her actions
- ✓ Acknowledge what might she be feeling
- ✓ Validate her experience
- ✓ Reflect on what you hear her saying
- ✓ Reflect her position
- ✓ Reflect/explore relevant parameters/limits
- ✓ Brainstorm solutions with her
- ✓ Stay positive and encourage her to pick an option and then remain involved and supportive by checking in with her

Using the Relational Language Skill Steps to Engage, Connect and Collaborate with Girls and Women; CORE Associates, Inc.

# Treatment Issues

1. Weight Concerns & Body Composition
2. Body Dissatisfaction & Thin-Internalization
3. Eating Pathology
4. Dieting & Metabolism
5. Nutrition
6. Physical Activity
7. Cognitive Distortions

# 1. Weight Concerns

Perception of fat and weight based on societal influences; and the impact of body composition on use and relapse

# Weight Concerns

- A primary reason women use legal and illegal drugs (especially stimulants)  
(Joe 1995, 1996; Brecht, O'Brien et al. 2004; Parkes et al. 2008; Greenfield, Back et al. 2010).
- Individuals newly abstinent from stimulants tend to gain *significant* weight  
(Henry, Minassian et al. 2012).
- Weight is core issue for women in treatment to prevent relapse



## Weight-related concerns related to drug use for women in substance abuse treatment: Prevalence and relationships with eating pathology

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### ABSTRACT

Substance abuse treatment increasingly reports weight-related concerns as motivation for drug use. However, limited research has explored the nature of these concerns or examined whether women in substance abuse treatment with weight-related concerns related to drug use differ from those who do not on variables relevant to eating pathology. Using a sample of 297 women in substance abuse treatment, this study examined two interrelated issues: (1) the prevalence and nature of weight-related concerns related to drug use and (2) whether women who endorse weight-related concerns related to drug use differ from those without weight-related concerns on body dissatisfaction, eating pathology, perceived pressure and internalization of thin-ideal media, and appearance-related drug use experiences. Descriptive analyses indicated that the majority of participants were concerned about gaining weight during treatment and/or that weight gain inhibited drug relapse. Analyses of outcome variables that women who reported weight-related concerns (but not those who did not) reported during treatment and relapse potential revealed higher levels of body dissatisfaction, eating bulimic symptoms, and internalization of thin-ideal media than women who did not endorse weight-related concerns. Results suggest that substance abuse treatment programs should be aware of and address weight-related concerns around drug use for women.

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### 1. Introduction

Women increasingly report weight concerns as a primary motivator for legal and illicit drug use (Brecht, O'Brien, van Marrewaere, & Anglin, 2004; Greenfield et al., 2007; Joe, 1999; Joe, 1998; Puckett, Sampey, Cox, & MacRae, 2008). Although systematic empirical research in this area is limited, a study examining methamphetamine use in 350 adults found that 30% of female participants reported that initial drug use was motivated by a desire to

lose weight (compared to 7% of males; Brecht et al., 2004). Similarly, in a large sample of 2005 high school seniors, female cigarette smokers reported significantly greater use of diet pills and amphetamines to lose weight than non-smokers (Crisp & Crane, 1991). Furthermore, the rapid, significant weight loss achieved by using some drugs (e.g., stimulants) is highly appealing to women with weight-related concerns, thereby serving as a primary motivator for continued substance use and treatment relapse (Joe, 1999; Joe, 1998).

Existing research also suggests that the relationships between substance abuse and weight-related concerns are stronger in clinical treatment-seeking samples than in the general public (The National Center on Addiction and Substance Abuse [NCSAJ], 2003). For example, while clinically diagnosed eating disorders are rather uncommon in the general population (Fisher, Hirsch, Pope, & Brainerd, 2007), eating pathology is relatively common among female substance users (Cohen et al., 2003; Greenfield, Bach, Larrison, & Brady, 2003). Epidemiological data suggest that about 15% of female substance abusers have had an eating disorder or strong subclinical symptoms of eating pathology (CNSA, 2003). In a sample of 51 women enrolled in an alcohol treatment program (both inpatient and outpatient), for example, about 23% were diagnosed with an eating disorder and 22% reported engaging in binge eating in the past 28 days (Povner & Fairburn, 1996). Similarly, in a study examining 304 women in inpatient substance abuse treatment, the lifetime prevalence of a

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# Weight-related concerns in a sample of 297 women in 7 facilities for treatment of SUD's

Warren et al., 2012

# *Weight-related concerns related to drug use*

Concerned about weight while in recovery?

Concerned that gaining weight could trigger relapse?

71%

45%

Concerned about using to lose weight after treatment?

30%

Started using drugs (in part) to lose weight?

Continued using drugs (in part) to lose weight?

33%

33%



# Women's Prison Study



Observe gender-specific pathologies related to eating, body dissatisfaction and weight

Determine if these are exacerbated in an incarcerated sample as compared to a community sample

Lindsay, 2015

# Common Measures

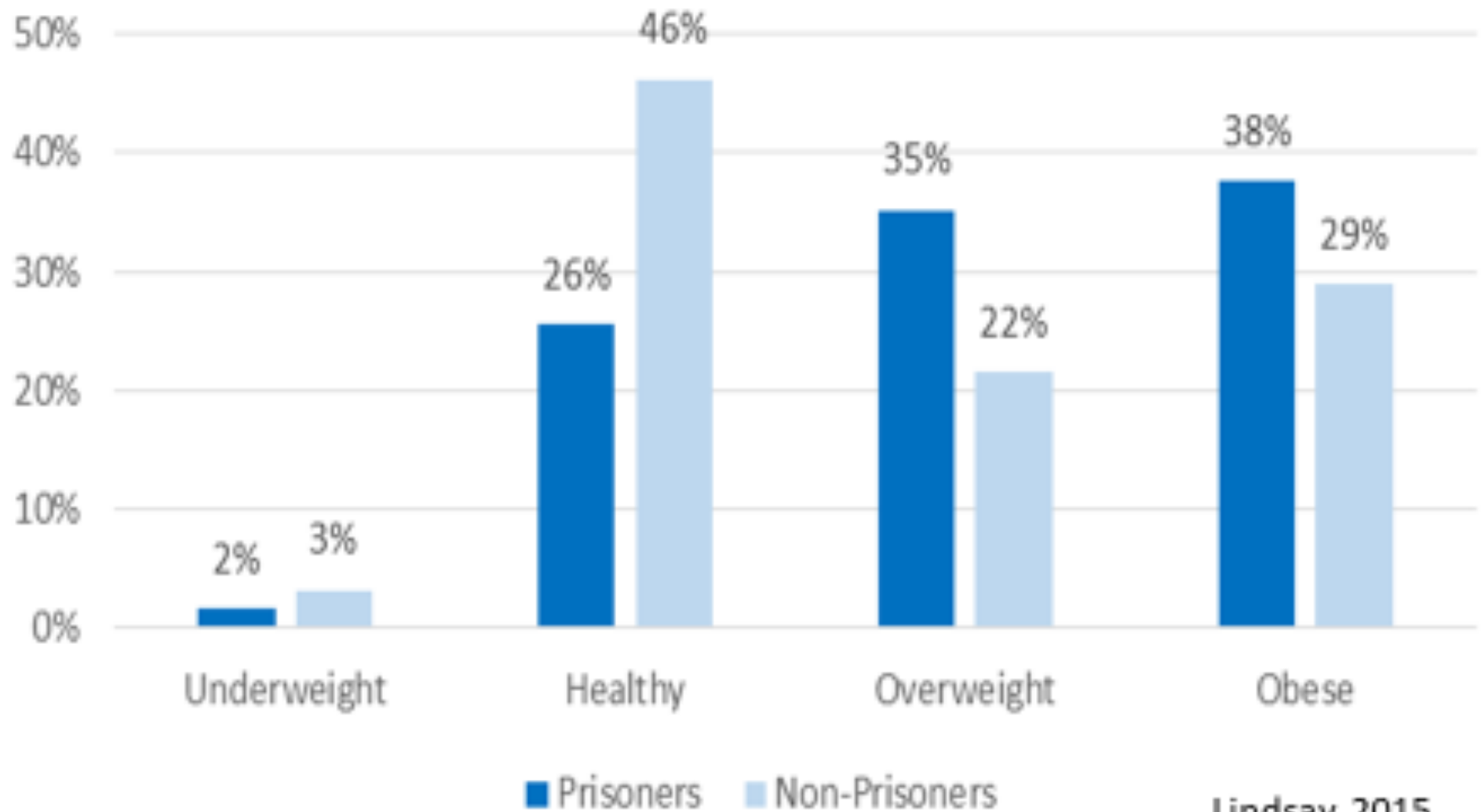
## Biometrics

- *Height, Weight, BMI*

## Validated clinical instruments:

- *BSQ-16* Body Shape Questionnaire (preoccupation with body weight and shape subscale)
- *SATAQ-3* Socio-Cultural Attitudes Towards Appearance Questionnaire (thin-ideal subscale)
- *Eat-26* Eating Attitudes Test (restrictive eating)
- *IES-2* Intuitive Eating Survey (satiety such as hunger and fullness cues subscale)
- *BES* Binge Eating Survey (severity of binge eating)

## BMI Categories (CDC)



Lindsay, 2015

# Gender Differences

## Related to Weight &

## Incarceration

- Women gain more weight during incarceration than men (Gates, 2014)
- U.S. - males less likely to be obese than males in GP; females more likely than females in GP (Herbert, 2012)

## 2. Body Dissatisfaction

The influence of media, culture, family and peers on women's body image and self-esteem; and its relationship to substance abuse

## Primary Research Outcomes Body Dissatisfaction

### Means and Std Dev for Eating Pathology and Body Dissatisfaction

Measure	Prisoners <i>M (SD)</i>	Non-prisoners <i>M (SD)</i>
SATAQ-3 INT-GEN (desire and behavior attempts for thin-ideal by society)	26.5 (7.08) <sup>(<i>p</i> &lt; .01)</sup>	25.74 (5.36)
BSQ (body dissatisfaction and preoccupation w weight)	49.89 (23.38) <sup>**</sup>	42.76 (17.95)
BIQLI* (self-experiences and life contexts)	12.12 (25.53) <sup>NS (<i>p</i> &lt; .05)</sup>	19.29 (24.13)

\* Lower score indicates a more negative effect

\*\* Significant <.001 (except where specified)

SATAQ ~ college sample; ~ (slightly >) SA sample; < ED patients;

BSQ > college sample, ~ SA sample

BIQLI opposite sex; friends and family; sex; grooming

Lindsay, 2015

# Body Image Disturbances

pathology & leads to extreme measures to  
decrease body weight

(Stice and Shaw 2003; Parkes, Saewyc et al. 2008).

- Often associated with low self-esteem,  
depressive symptoms and increased anxiety  
(Paxton, Neumark-Sztainer et al. 2006)



# Icons with issues

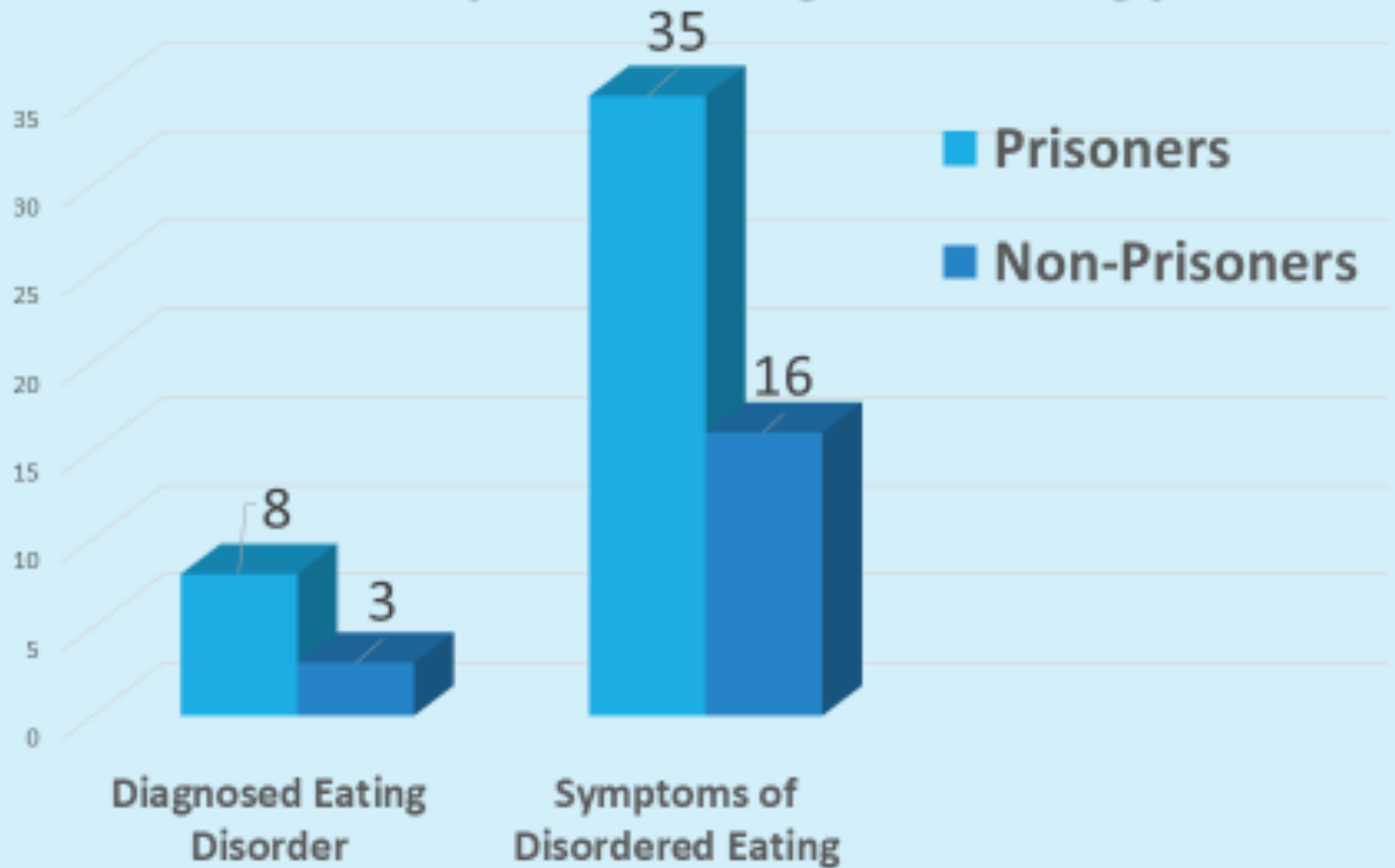




# 3. Eating Pathology

Disordered eating behaviors and other co-occurring disorders; risk factors associated with these issues; and the role they play in recovery

# Self-Report Eating Pathology



## Primary Research Outcomes Eating Pathology

### Means and Std Dev for Eating Pathology and Body Dissatisfaction

Measure	Prisoners <i>M (SD)</i>	Non-prisoners <i>M (SD)</i>
EAT-TOTAL (>extreme weight loss and restrictive eating behaviors)	12.16 (14.52)**	6.34 (7.31)
EAT-CONTROL (negative self-control around food)	2.27 (4.17)**	1.18 (1.31)
EAT-BN (BN behaviors)	2.03 (3.65)**	.91 (2.23)
EAT-DIET (avoidance of certain foods)	7.68 (8.93)**	4.59 (5.32)

\*\* Significant <.001 (except where specified)

Cutoff (>20) P=20% vs NP=5%;  $p = .002$  (mean scores NS)

Lindsay, 2015

## Primary Research Outcomes Eating Pathology

### Means and Std Dev for Eating Pathology and Body Dissatisfaction

Measure	Prisoners <i>M (SD)</i>	Non-prisoners <i>M (SD)</i>
<b>IES-2</b>		
IES-2 PERMISSION* (permiss to eat forbidden foods)	3.038 (1.48)**	3.3547 (.682)
IES-2 HUNGER/SATIETY* (rely on situational and emotional cues; lead to guilt and BED)	3.07 (1.51)**	3.5837 (.642)
BES (severity of binge eating)	13.95 (11.07)**	9.41 (7.50)

\* Lower score indicates a more negative effect

\*\* Significant <.001 (except where specified)

"Binge eaters" (> 17) P=39% vs NP=16%;  $p < .001$  (NS using means)

"Severe binge eaters" (>26) P=16% vs NP=5%;  $p < .001$  (NS using means)

Lindsay, 2015

# Addiction Transfer

- ✓ Gambling, sex, relationships or shopping to fill a void
- ✓ Eating or not eating to numb emotions or pain
- ✓ Using exercise, caffeine, pills or dieting to get the same effects as a drug previously used

**Disordered eating is NOT recovery**

# Substitute the drug pattern

*e.g. use food (or something else) to:*

**Substitute the drug problem**

- Numb the physical or emotional pain

- Gain control of the pain (restriction)

- Fill a void (binge)

# Compensatory Behaviors

Attempting to **GET RID** of the calories...



- Excessive exercise
- Purging (making yourself throw up)
- Misusing laxatives
- Starvation
- Diet pills
- Drug use/misuse



# Eating Pathology

## *Co-morbidity with Substance Abuse*

- Often develop/resurface during recovery (remission during drug use)
- Food consumption relies on intuitive satiety cues (which become impaired following substance abuse cessation)
- Results in overeating, binge eating, compensatory behaviors and eating disturbances
  - *Unhealthy dieting* (e.g. laxative, vomiting, extreme food restriction)
  - *Eating practices* (e.g. binge eating)
  - *Full-blown eating disorders* (e.g. BN, AN, BED, etc.)

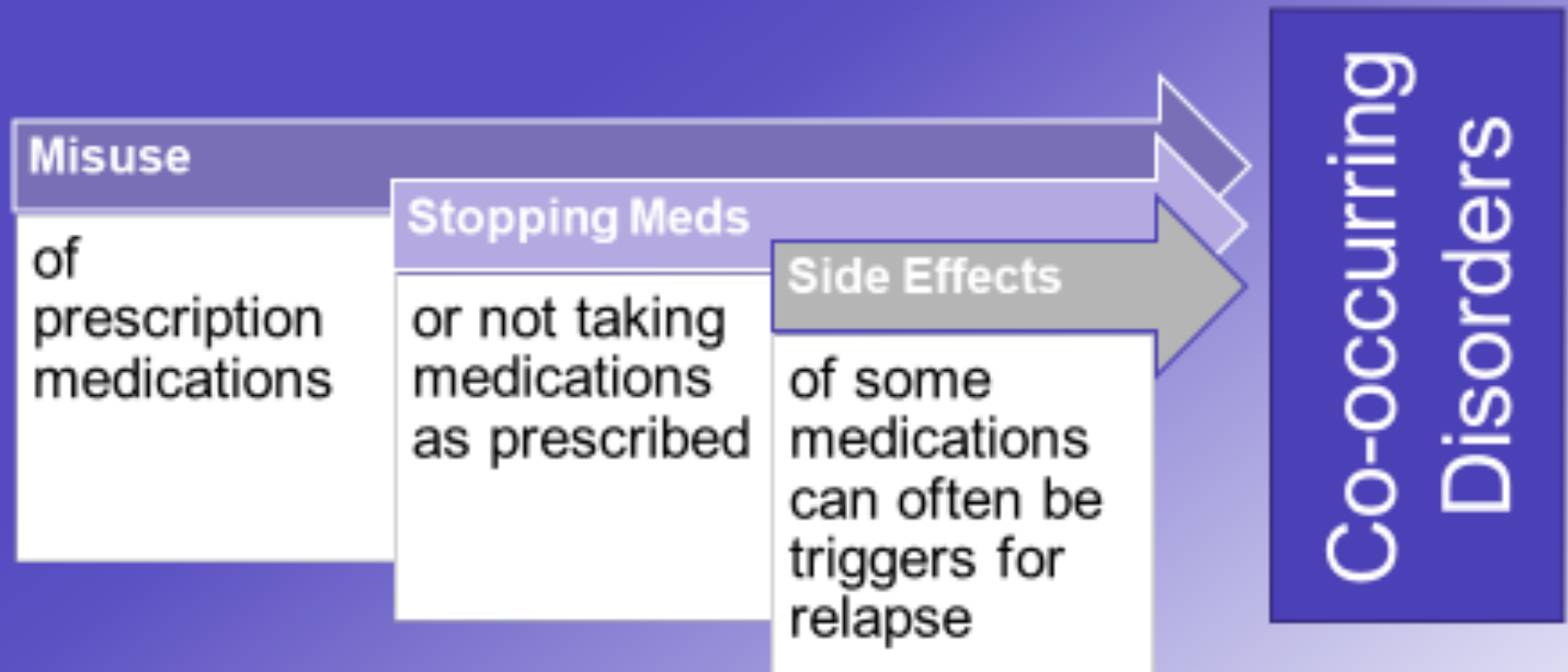
(Jacobi, Wittchen et al. 2004; Hudson, Hiripi et al. 2007; Hilbert 2012)



# Gears



# How Medications Can Lead to Co-occurring Disorders



**What does imbalance look like?**



**Extremes don't fix our underlying problems**

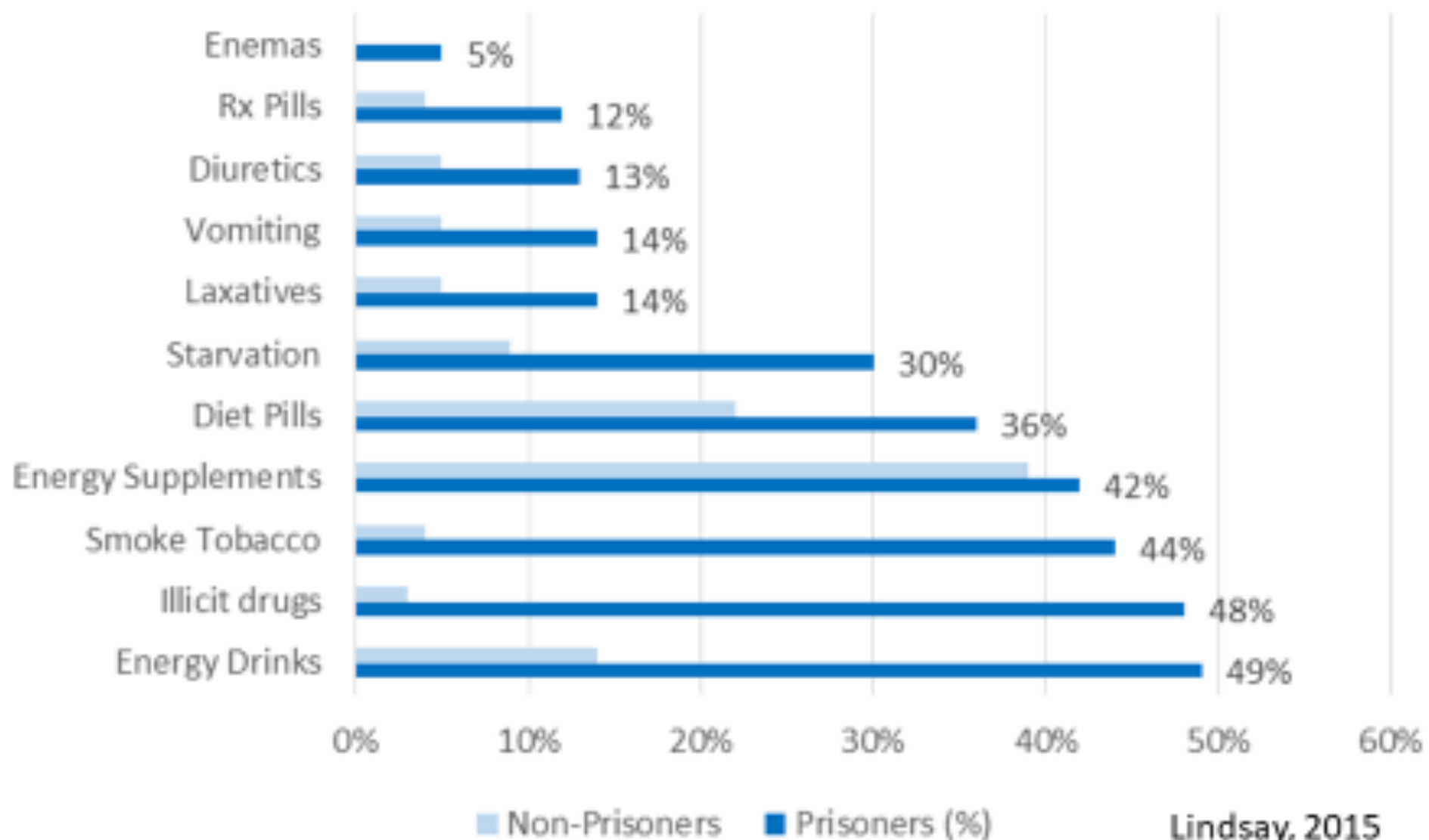
## 4. Dieting & Metabolism

Dangerous dieting and supplement practices; and healthy alternatives to achieve energy balance and improve impaired metabolism

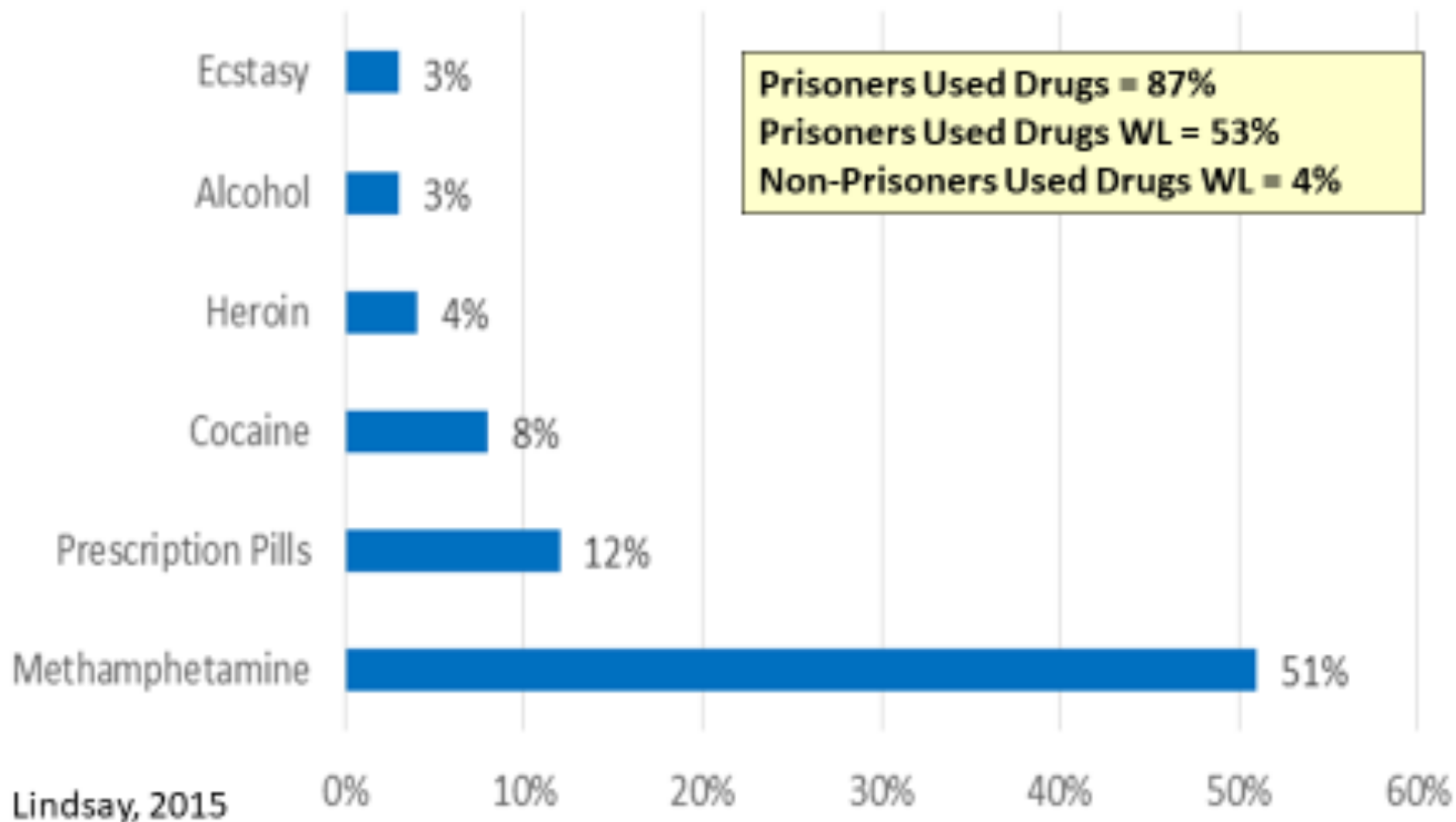
# **Dieting & Supplements**

Dietary restriction, energy & dietary supplements, tobacco, and anorexic & bulimic practices often are a “self treatment of-choice” and a gateway to/back to methamphetamine or other illicit substances

## Methods of Weight Loss Used Sometimes, Often, Very Often



## All Substances Reported by Prisoners Used for Weight Loss





# Substance Use & Metabolism

Cycling between using & withdrawal (much like “yo-yo” dieting) may lead to metabolism changes & disordered eating patterns resulting in weight loss or gain

## Weight loss from:

- Impaired metabolism
- Excessive movement
- Malnutrition or inadequate calorie/nutrient intake
- Water loss & dehydration
- Muscle & bone loss (& fat loss)

## Weight gain from:

- Slowed metabolism
- Significantly decreased energy
- Intense food cravings & intake with distorted hunger/satisfaction cues
- Intake of “empty calorie” foods
- Restoration of muscle & bone tissue



# Energy Drinks & Shots

One study reported that energy  
**Consumption**  
drink consumption in a college

sample of 1060 students

significantly predicted

subsequent nonmedical

prescription stimulant use,

illicit drug use and alcohol

# Side Effects

Concentrated amounts of caffeine act as a natural diuretic and deplete nutrients by slowing down absorption and flushing them out (especially water

**Lack of important nutrients can have side effects:**  
(soluble vitamins and minerals)

**Nervousness**

**Anxiety**

**Irritability**

**Blood sugar problems**

**Dehydration**

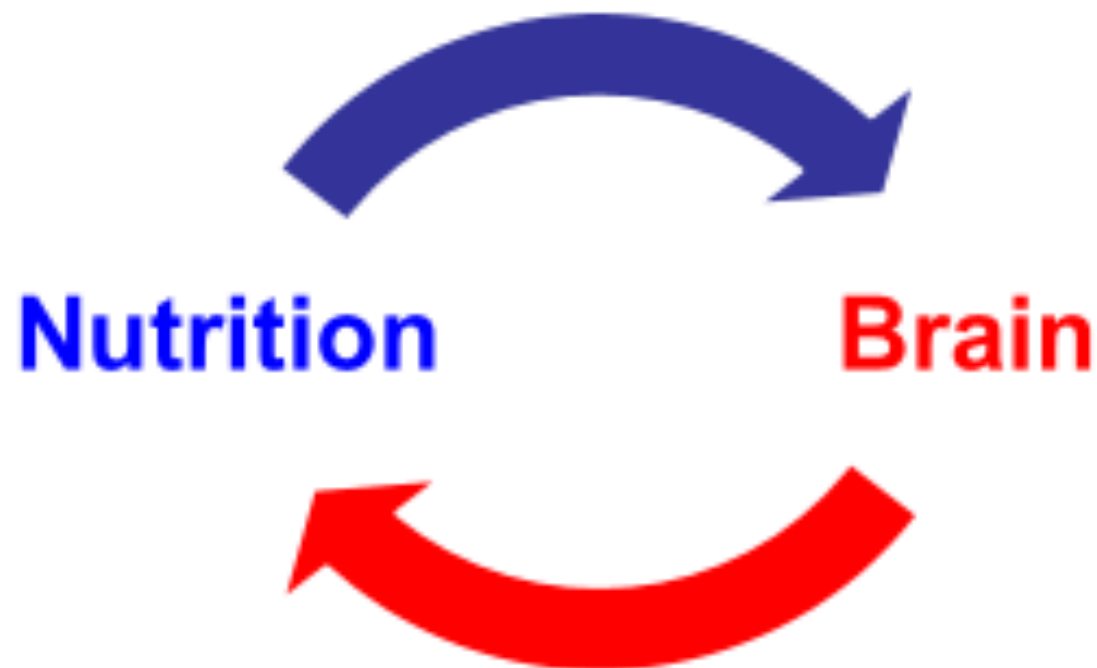
**Dependence**

# 5. Nutrition

The basic nutrients our bodies need; deficiencies while using drugs and during treatment; and the role of a healthy diet for successful recovery

# The Nutrition Paradox

Poor nutrition negatively impacts psychological health and addiction



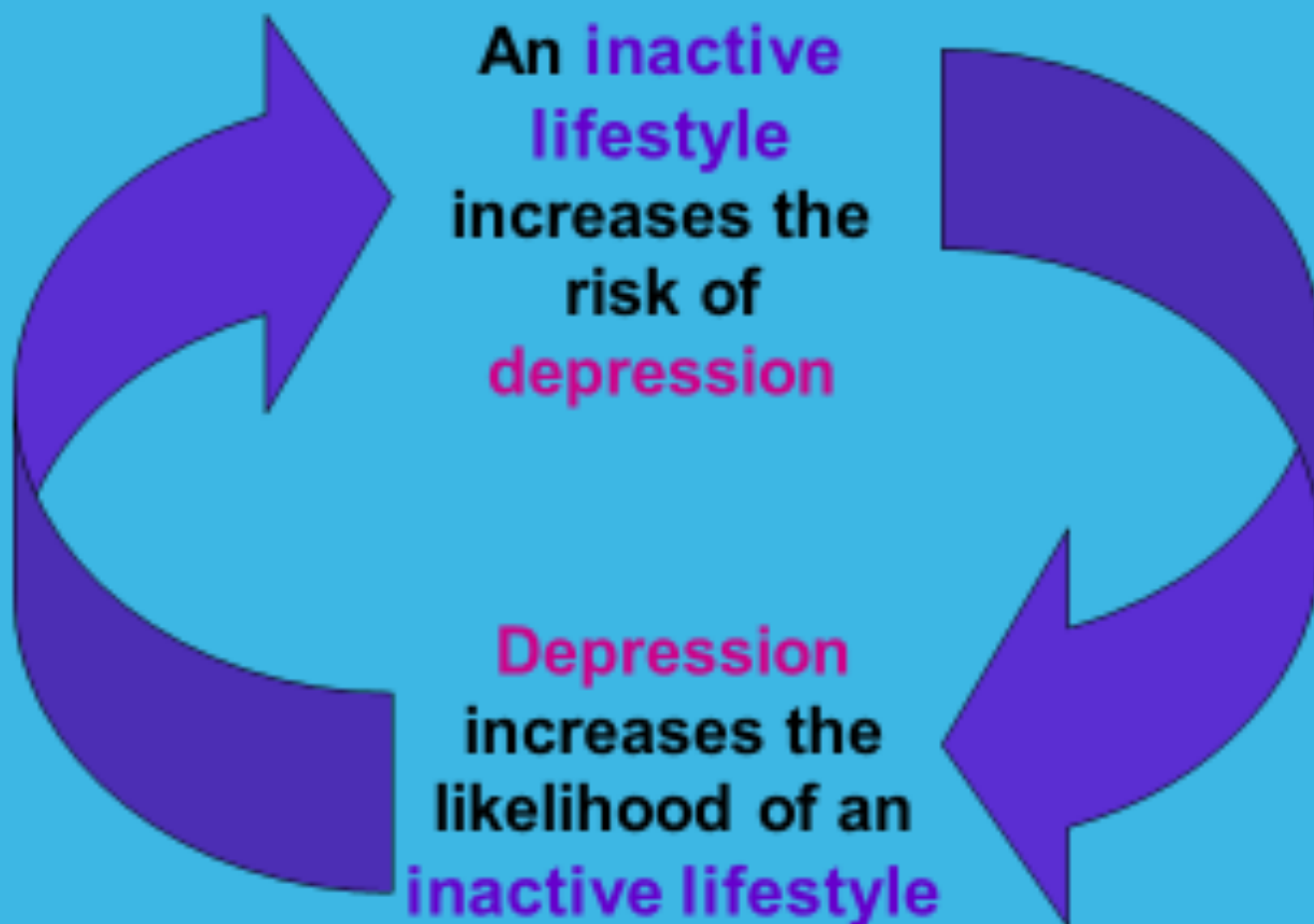
Poor psychological health and addiction negatively impacts nutrition

## 6. Physical Activity

The role of physical activity in substance use disorder, depression, anger and stress; and how to promote physical activity during recovery



# Depression & Activity influence each other:



“I used because I was depressed”

BECAUSE

“Since I stopped using, I’ve been depressed”

SINCE

# Because Since and While

“While I was using I was depressed”

WHILE

# Dopamine & the Brain

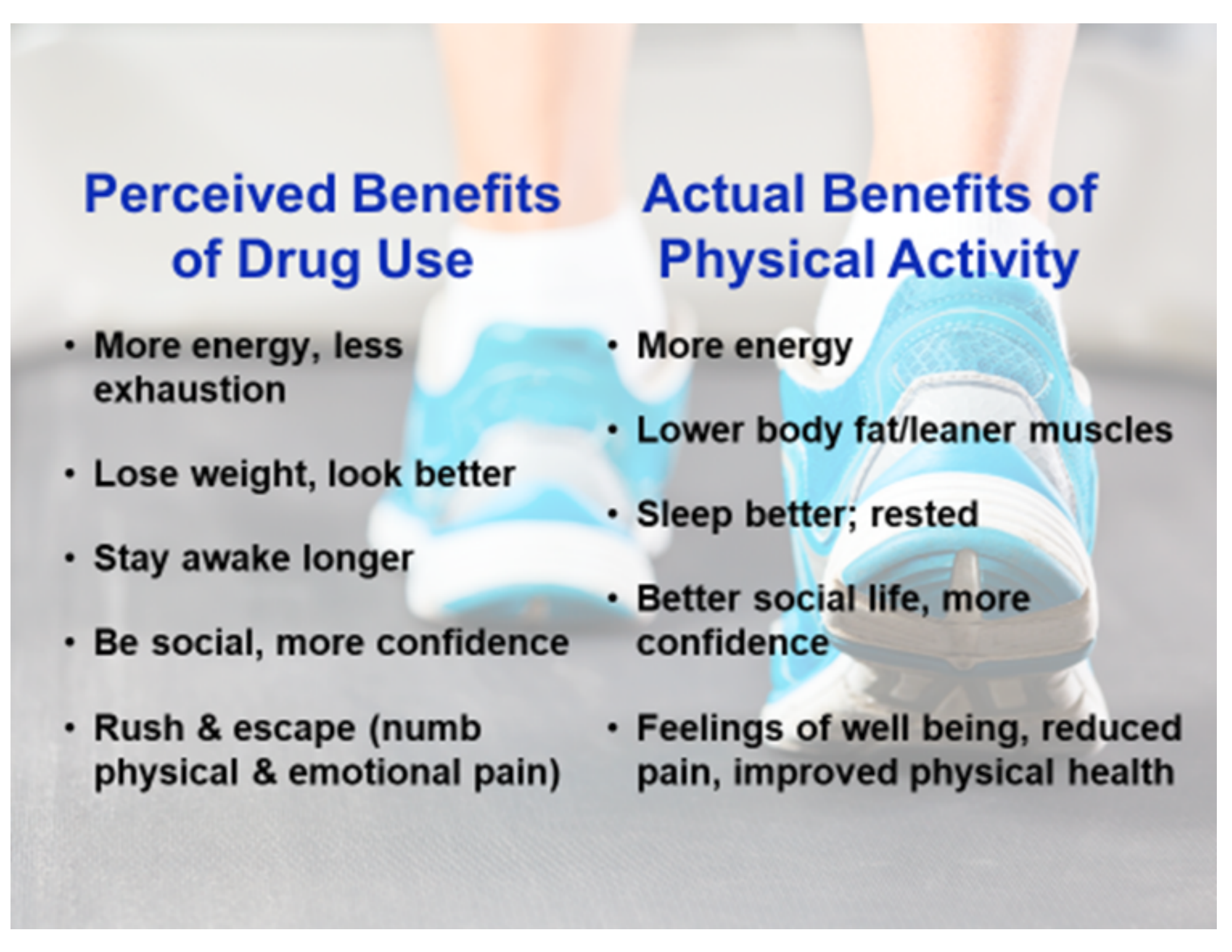
## *The “Motivation” Center*

**Chemical in the brain  
that controls  
motivation, drive &  
energy**

**Drugs can change the  
balance of dopamine in  
the brain**







## **Perceived Benefits of Drug Use**

- More energy, less exhaustion
- Lose weight, look better
- Stay awake longer
- Be social, more confidence
- Rush & escape (numb physical & emotional pain)

## **Actual Benefits of Physical Activity**

- More energy
- Lower body fat/leaner muscles
- Sleep better; rested
- Better social life, more confidence
- Feelings of well being, reduced pain, improved physical health

*Added*

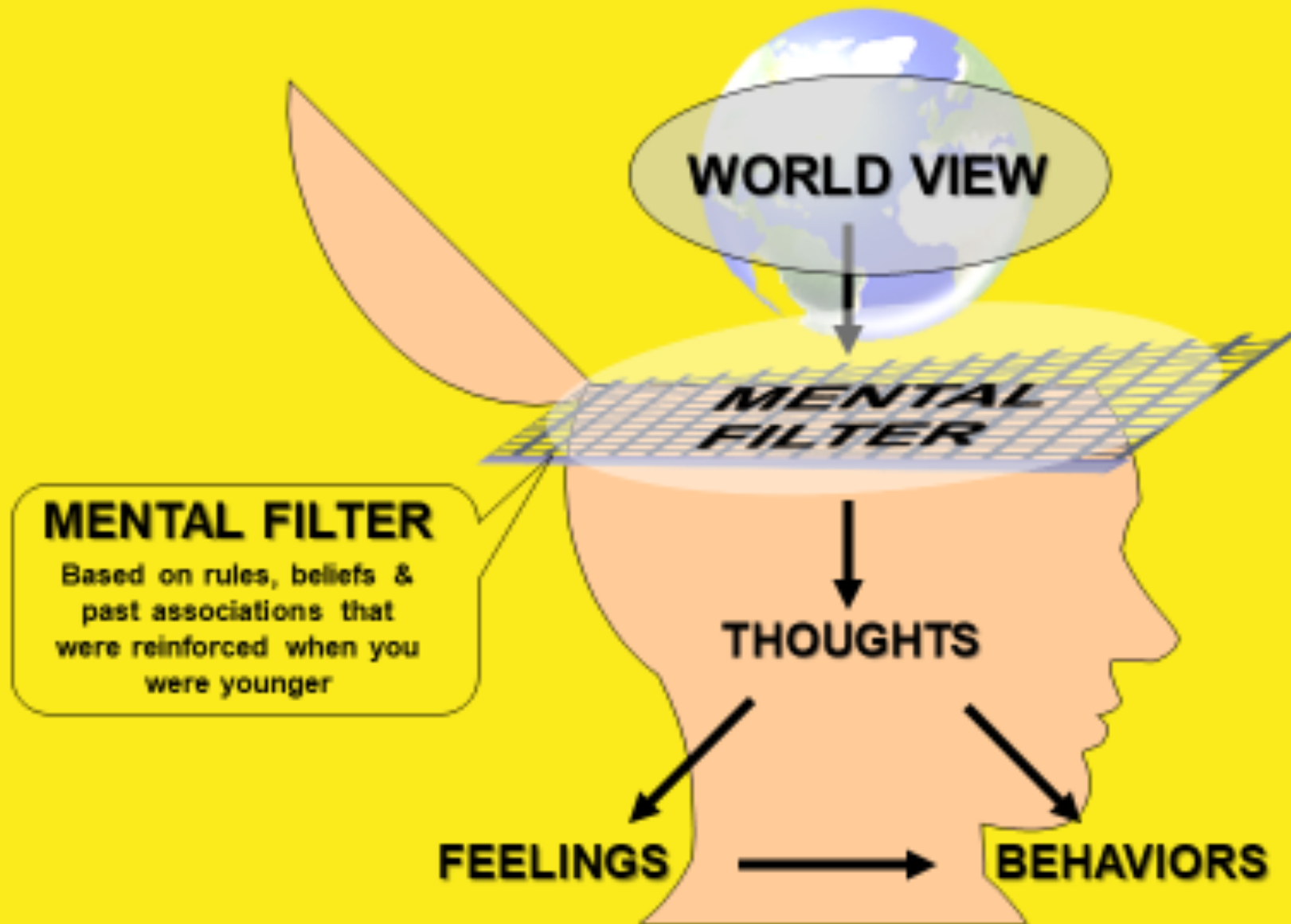
## **Benefits During Recovery**

- **Rebuilds muscle & bone loss**
- **Strengthens a damaged heart**
- **Slows the aging process**  
(from damage to tissues)
- **Increases metabolism**
- **Increases focus & attention**

## 7. Cognitive Distortion

Mental filters and influences that affect eating behaviors and improve recovery rates

# MENTAL FILTER





**What I THINK  
about myself...**

**affects how I  
FEEL....**

**which affects my**



# Repetitive Negative Thinking (RNT)

- Higher RNT predicted higher binge eating, weighing, body checking, excessive exercise and restriction
- Higher binge eating, weighing, body checking, excessive exercise, and restriction predicted higher RNT

(Startup et al., 2013; Sala et al, 2019)

# What do we know?

- ↑ body dissatisfaction & preoccupation with shape
- ↑ severe eating pathologies
- ↓ ability to employ satiety cues
- ↑ rates of binge eating
- ↑ body weights and BMI
- ↑ weight-related concerns
- ↑ unhealthy dieting practices
- ↑ use of illicit drugs for losing weight

# Gaps in Treatment

- Few providers address behaviors associated with obesity, eating pathologies and weight concerns
- These may even contribute to these mental health conditions
- Left untreated - trigger for relapse





**Access to gender-responsive education, behavioral interventions, treatment and support efforts designed to address the specific and unique needs of women**

**Should include a team approach**

# Recommendations

Prisons, jails, treatment facilities should take a PH approach e.g.

- Decrease sedentary behavior
- Promote opportunities for PA
- Improve dining hall nutrition
- Increase healthy options on commissary

Provide gender-responsive programs to address these issues

# *Healthy Steps to Freedom*



**Published by:**



University of Nevada  
Cooperative Extension

# 10 Weeks, ~90 Mins

Improve quality of life by increasing health and nutrition knowledge while building a skillset to help manage:

- Substance abuse & health
- Body image, self esteem
- Eating pathology
- Nutrition & physical activity
- Cognitive behaviors
- Weight & body composition
- Dieting & metabolism
- External influences (media, social media, relationships)





# Effectiveness of the original 12-week program



Journal of Substance Abuse Treatment 43 (2012) 61–69

Journal of  
Substance  
Abuse  
Treatment

Regular article

## A gender-specific approach to improving substance abuse treatment for women: The Healthy Steps to Freedom program

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### Abstract

Given that women increasingly report using drugs to lose weight, substance abuse treatment programs must include body image, weight, eating pathology, and health knowledge as core intervention targets. This study tested the efficacy of a supplemental health and body image curriculum designed for women in substance abuse treatment who report weight concerns called Healthy Steps to Freedom (HSF). Data from 124 adult women recruited from substance abuse treatment facilities in southern Nevada completed measures of drug use, body dissatisfaction, eating pathology, thin-ideal internalization, and health knowledge/behaviors before and after participation in the 12-week HSF program. Results revealed that thin-ideal internalization, body dissatisfaction, and eating disorder symptoms significantly decreased after HSF program participation, whereas health-related behaviors (e.g., increased healthy food consumption) and knowledge (e.g., understanding of basic nutrition, exercise) increased. These results suggest that the inclusion of the HSF program in substance abuse treatment improves weight-related issues in substance-abusing women. © 2012 Elsevier Inc. All rights reserved.

## **Results of 10-Week (2018) :**

Mean **age** of participants (n=141) = 38.3

Mean # of **children** = 2.4

*Weight Perception* - self-reported an “**ideal**

*Eating Pathology* – **improved eating attitudes** using the (EAT-26) scale Wilcoxon Signed Rank ( $Z=-2.848$ ,  $p=.004$ );

*Socio-Cultural* - **improved attitude about body image and perception of one's self** using the thin-ideal internalization (SATAQ-3) scale Wilcoxon Signed Rank ( $Z=-2.787$ ,  $p < .001$ ).

*Intuitive Eating* – **positive changes in intuitive eating** using the IES intuitive eating subscales  
Wilcoxon Signed Rank ( $Z=-5.305$ ,  $p < .001$ ),

*Binge Eating*- **positive changes in binge eating attitudes** using the Binge Eating Scale (BES)  
Wilcoxon Signed Rank ( $Z=-5.045$   $p < .001$ );

*Activity/Inactivity* – **increases in physical activity** (Total MET Min) [pre  $\mu=2654.098$   
SD=3364.79] [post  $\mu=3813.8014$  SD=3999.86]  
 $t=-3.612$  ( $p < .001$ )



# SUMMARY OF MAJOR FINDINGS

- Weight status may increase the risk of re-offending for female prisoners and drug offenders
- Concern with weight gain was identified as a trigger for drug relapse
- Concern about using drugs to lose weight following release was prevalent
- Given that many of the women gain weight after arrest/incarceration, this concern may be warranted in this population

# **Gender-Responsive is key!**

Overweight/obesity, lack of physical activity, poor nutrition, perceived weight concerns, body dissatisfaction and poor weight management behaviors lead to “self-medication” to lose weight and increase energy, including illicit drug use which often results in re-offense

# Questions?





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