


WHY CAN'T YOU JUST STOP?

The Science and Treatment of Addiction

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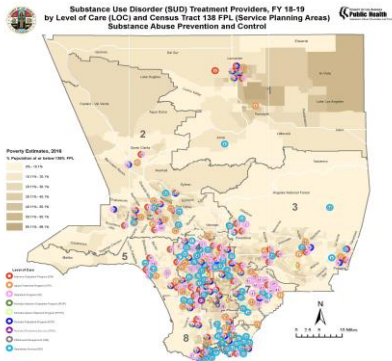


SUBSTANCE ABUSE PREVENTION AND CONTROL MISSION

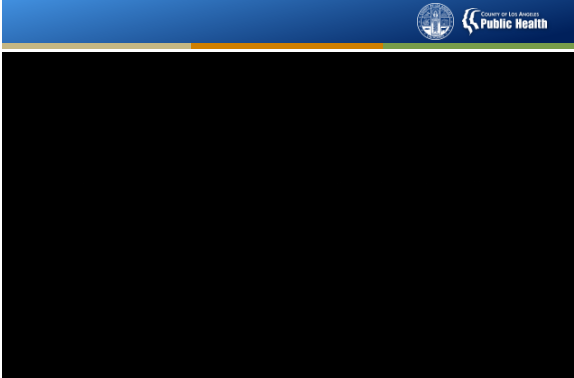
All people and communities in Los Angeles County have a chance to pursue their dreams and to fulfill their promise without the burden of alcohol or drug abuse and addiction!

2





3





What came to mind as you viewed this?

What opinions did you have about the bird?

What did you feel at the end?





LEARNING OBJECTIVES

Upon completion of this workshop, we hope that you are able to:

- Identify how addiction is a medical condition (not a moral failing).
- Identify two determinants impacting addiction in African American communities.
- Describe three ways to access no cost substance use disorder treatment

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 Associate Medical Director, Treatment Services

Substance Abuse Prevention and Control



Today's talk

- What is addiction?
- What is the science behind addiction?
- What are the principle pathways of addiction?
- Can medication actually help?

8



Addiction: A Definition

- Definition: A chronic disease in which a person seeks a substance such as alcohol or drugs despite the negative impact their drug and alcohol use causes them
- In DSM-5, the term "substance use disorder" is synonymous with addiction

9



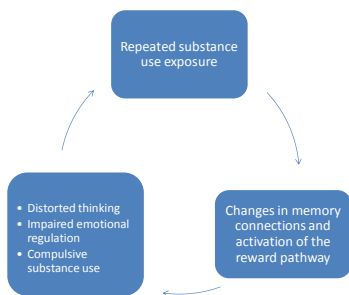
What contributes to addiction and why is it so hard to stop?

- Biological
 - e.g., Genes
- Environmental
 - e.g., Chaotic home life, peer factors
- Drug characteristics
 - e.g., How is the drug administered?

10



How does substance use affect the brain?

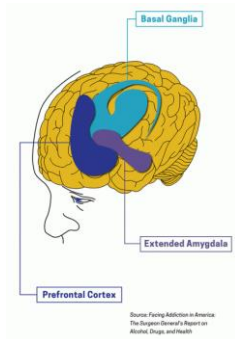


11



What key brain areas are involved?

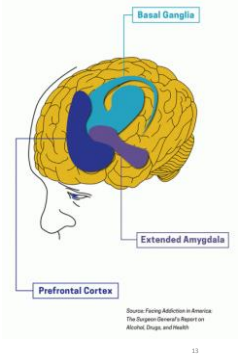
- Basal ganglia
 - Key part of the reward pathway
 - Linked to drug euphoria
 - Non-drug pleasures lose impact



12

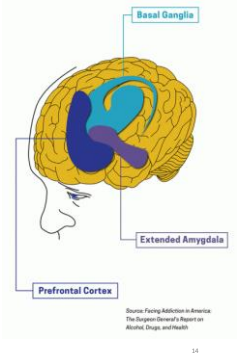
What key brain areas are involved?

- Extended amygdala
 - Important for stress-related feelings (e.g. anxiety, irritability)
 - Becomes more sensitive due to substance use → seeking substances for relief



What key brain areas are involved?

- Pre-frontal cortex
 - Involved in thinking, planning, self-control
 - Reduced impulse control



What causes the "high" of substance use?

- Endorphins
- Other neurotransmitters involved in reward circuit
 - Greater volume produced with substance use than associated with non-substance use rewards (e.g., eating, social interaction)



How about dopamine?

- Our brains works so that we are more likely to do pleasurable activities again and again
- When dopamine is released
 - signals an important activity is happening and can help form habits
- Substance use leads to higher levels of dopamine than normal

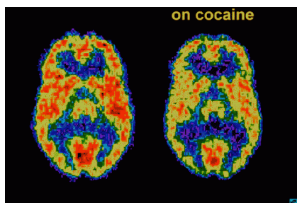
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Just how high are these levels of dopamine?

- Normal dopamine amounts: 50-100 ng/dl per day
- Substance use
 - Tobacco: 450 ng/dl
 - Marijuana: 650 ng/dl
 - Heroin: 975 ng/dl
 - Methamphetamine → 1100 ng/dl

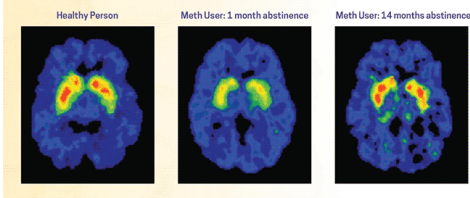
17

What are some additional effects of substance use?



18

Can the brain recover from substance use?



19

What about medications?

- Medications for Addiction Treatment (MAT) combines medications along with behavioral treatment
- Comprehensive approach



20

What medications are available?

- Opioids
 - Naltrexone
 - Buprenorphine
 - Methadone
- Alcohol
 - Disulfiram
 - Acamprosate

21

Why is MAT important?

- Chronic disease treatment benefits from a combination-style approach
- MAT helps to counter the brain changes that affect the reward pathway
- Helps a person be more receptive to recovery treatment



22

Summary

- Substance use disorders can impact brain functioning in various ways
- Changes in reward pathways, stress tolerance, and impulse control due to brain function changes makes it difficult to stop
- Brain recovery is possible with treatment
- MAT is an important part of treatment

23

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A Path to Recovery and Healthy Living



Data Source

- NSUDH – National Survey on Drug Use and Health (est. 1971)
- Data collected from every state and DC
- Data displayed here collected from individuals ages 18 and older
- N = 50, 833
- Comparisons made to the National Average

25



Plan for Today

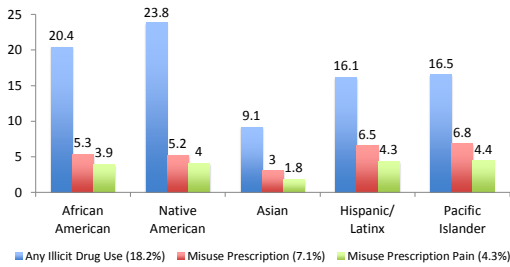
- Present some data collected from a national survey
- Present additional outcomes collected as part of various research studies
- Discuss the implications

26

There is Good News and Bad News



Substance Use Disparities



28



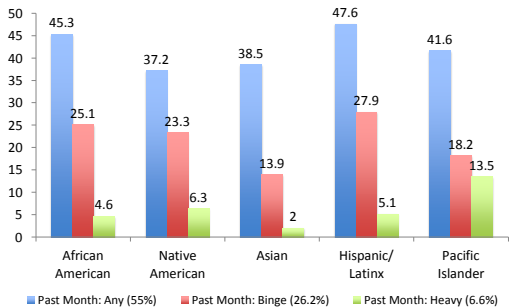
Definitions

- Binge drinking means
 - Men: five or more drinks on same occasion on at least one day
 - Women: four or more drinks on same occasion on at least one day
- Heavy use means binge drinking on at least five or more days in the past 30 days

29



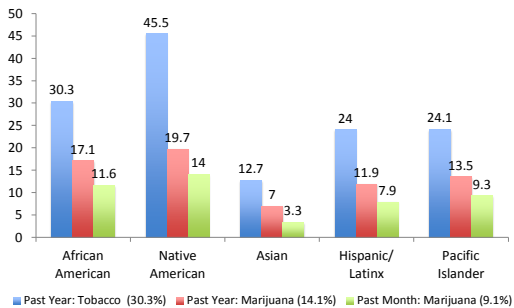
Alcohol Use Disparities



30



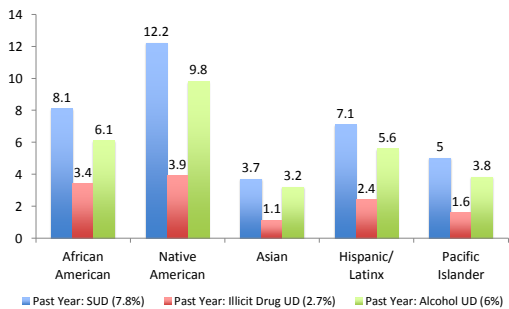
Tobacco and Marijuana Use Disparities



31



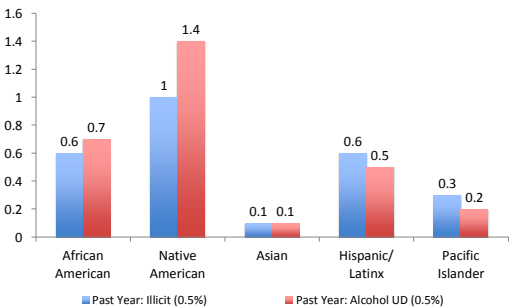
SUD Disorder Diagnosis Disparities



32



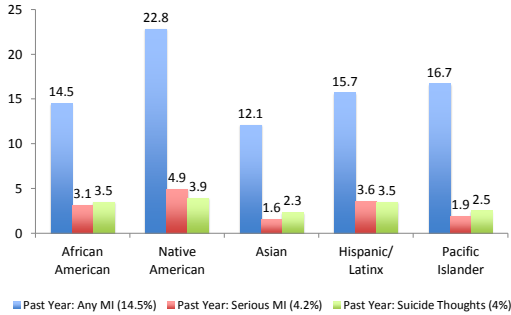
SUD Disorder Treatment Disparities



33



Mental Health Disparities



34



Summary of Disparity Data for African Americans (1 of 3)

- African Americans report **more** ... (when compared to the national average)
 - Illicit drug use
 - Marijuana use (past year & past month)
- African Americans are more likely to have an illicit drug use disorder

35



Summary of Disparity Data for African Americans (2 of 3)

- African Americans report **less**... (when compared to the national average)
 - Alcohol use (past year & past month)
 - Prescription drug misuse
- African Americans are less likely to report any mental illness or to report a serious mental illness
- African Americans are less likely to report receiving mental health treatment or counseling in the past year

36



Summary of Disparity Data for African Americans (3 of 3)

- Data on African Americans are similar to the national average regarding:
 - Tobacco use (past year)
 - Binge drinking (past month)
 - Misusing prescription pain reliever (past year)
 - Having a substance use disorder
 - Having an alcohol use disorder
 - Receiving treatment for illicit drug or alcohol use
 - Thoughts of suicide

37



But is this *really* “good” news?





Explanations of Results

- 100% Correct data – unlikely since this does not exist
- Good data but not reaching the individuals with the disorders
- Self selection – voluntary survey
- “Faking well”
- Let’s assume data are correct – other studies have found similar results

39



Other Outcomes

- African Americans are
 - Less likely to use medications
 - More likely to have poor doctor-patient communication
 - Less likely to initiate antidepressant medication treatment
 - More likely to discontinue treatment without consulting doctor
- Stigma both with the culture and outside of the culture

40



More Outcomes

- African Americans are less likely to complete SUD treatment
 - Perhaps due to economics (unemployment and lack of housing)
- African Americans show less improvement following inpatient treatment for SMI
- African Americans are less likely to use mental health services (OP, IP, and medication)

41



Some (Historic) Barriers to Treatment

- Mistrust of the medical field (based on history of unethical medical practices)
- Lack of insurance/funding to pay for treatment
- Distance from home to treatment provider
- Limited access due to time constraints (offices open 9-5; same hours most of us work)
- Problems related to childcare and transportation.

42



What Can Be Done?

- Focus on primary care- as point of entry
 - Lack of access to specialty care
 - Income and insurance barriers
 - Stigma around SUD and MH
- Integrated care has shown improve outcomes (data are still limited)
- Adopting patient centered communications around the use of medications

43



More to be Done

- Include the patient in treatment decisions (elicit preferences)
- Learn/Train care givers how to deal with cultural mistrust
- Understand that some of our assessment tools may be biased and learn ways to work around them

44

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Substance Abuse Prevention and Control








Figure 2
Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

EVENTS IN THE HISTORY OF SUD TREATMENT

taken from *Slaying the Dragon: The History of Addiction Treatment and Recovery in America* by William White

- Documented mutual aid groups in the US date back to the year 1750 and occurred among American Indians

- Frederick Douglass:
 - Admitted to a period of intemperance (alcoholism)
 - In 1845 signed a pledge of abstinence
 - Framed alcoholism in an Afrocentric context
 - Viewed abstinence as essential to transition from slavery to citizenship!
 - Freedom from drunkenness was freedom from slavery!

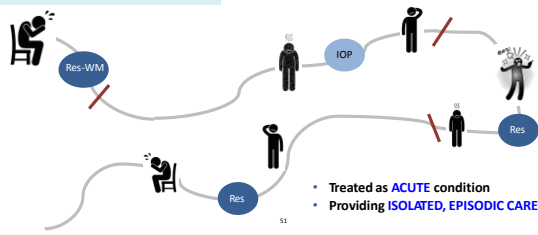


OTHER RELEVANT EVENTS IN THE HISTORY OF TREATMENT

YEAR	EVENT
1880	Cocaine is recommended by Sigmund Freud and other American physicians in the treatment of alcoholism and morphine addiction. Bottled home cures for addiction become popular, but most were exposed to contain alcohol, opium, morphine, cocaine and cannabis.
1939	<i>Alcoholics Anonymous</i> book is published (founded by Bill W. & Dr. Bob S. in 1937)
1992	The American Society of Addiction Medicine publishes its <i>ASAM Patient Placement Criteria for the Treatment of Psychoactive Substance Use Disorders</i> . The ASAM criteria shifts treatment toward a "levels of care" system rather than a single modality indiscriminately applied to all those entering treatment.
2000	Drs. Thomas McLellan, David Lewis, Charles O'Brien, and Herbert Kleber call for addiction to be considered a chronic medical illness, in the <i>Journal of the American Medical Association</i> article: "Drug Dependence: A Chronic Medical Illness Implications for Treatment, Insurance, and Outcome Evaluation".
2008	The <i>Mental Health Parity and Addiction Equity Act (MHPAEA)</i> requires health insurers and group plans (including Medicaid) to provide the same level of benefits for mental health & substance use treatment as for medical/surgical care.
2010	President Obama signs the <i>Affordable Care Act (ACA)</i> to achieve the "triple aim" of improving the individual experience of care, improving health, and reducing the cost of care.
2017	Los Angeles County Department of Public Health Substance Abuse Prevention and Control launches the transformation of its treatment system by expanding access to substance use disorder treatment under the Drug Medi-Cal Organized Delivery System.

- KEY**
- Lifespan
 - Res = Residential
 - IOP = Intensive Outpatient
 - OP = Outpatient
 - RSS = Recovery Support Services
 - Res-WM = Residential Withdrawal Management
 - OP-WM = Outpatient Withdrawal Management
 - Relapse

An SUD Recovery Journey

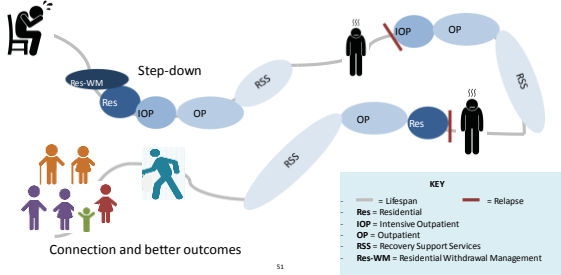




50

A Different SUD Recovery Journey

- Treating condition as **CHRONIC**
- Providing **FULL CONTINUUM OF SUD CARE**



51

Outpatient	
Who	Youth and Adults
What	Less intensive community-based services (up to 9 hours per week) that include group counseling, patient education, individual counseling, family therapy, crisis assistance, and case management



52

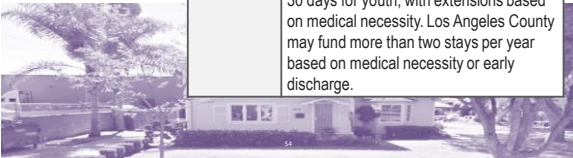
Intensive Outpatient	
Who	Youth and Adults
What	More intensive community-based services (up to 19 hours per week or up to 30 hours per week for perinatal patients) that include group counseling, patient education, individual counseling, family therapy, crisis assistance, and case management



53



Residential – A Preauthorized Service	
Who	Youth and Adults
What	Short-term residential services are determined by medical necessity and include group counseling, patient education, individual counseling, family therapy, crisis assistance, and case management
Duration	Initial 60-day authorization for adults and 30 days for youth, with extensions based on medical necessity. Los Angeles County may fund more than two stays per year based on medical necessity or early discharge.



Withdrawal Management (Detox)	
Who	Youth (if authorized) and Adults
What	Outpatient or residential withdrawal management services (also known as detox) with or without medication services for up to 14 days
Medication-Assisted Treatment/Opioid Program	
Who	Youth (if authorized) and Adults with alcohol or opioid use disorder
What	Prescribe medications (methadone, buprenorphine, disulfiram, naloxone), as well as provide case management, and group, family therapy, and individual counseling

55

Recovery Bridge Housing	
Who	Adults concurrently enrolled in outpatient, intensive outpatient, medication-assisted treatment/opioid program, who meet high-risk criteria (e.g., LGBTQ, HIV/AIDS, chronically homeless, IV drug user, high service utilizers, transition age youth)
What	Adults up to 180 days per calendar year. Perinatal/Postpartum up to length of pregnancy and 60-days after birth

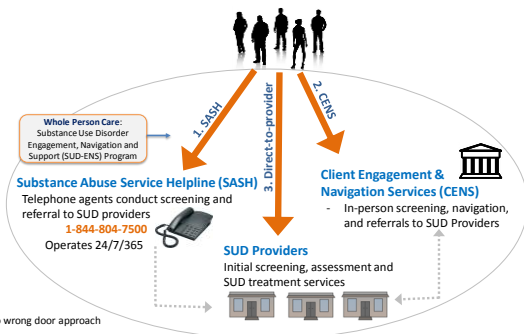


Recovery Support Services	
Who	Youth and Adults – Post Treatment
What	Support services available after treatment completion, including group counseling, individual counseling, relapse prevention, recovery coaching, and case management



56

Entryways into the Specialty SUD System



*No wrong door approach



If you, a loved one, or someone you know needs help here is how they can connect

- Substance Abuse Services Hotline (SASH):

1-844-804-7500

- SAPC Email

SUDTransformation@ph.lacounty.gov

- SAPC Website's Public and Patient Portal:

<http://publichealth.lacounty.gov/sapc/PatientPublic.htm>

- Service and Bed Availability Tool:

<http://sapccis.ph.lacounty.gov/sbat/>



61



Thank You

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62
