



THE INTERSECTIONALITY OF HIV, SUBSTANCE USE DISORDER, AND MENTAL HEALTH

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Objectives:

1

Increase the awareness of substance use and abuse among people living with HIV.

2

Discuss the impact of the social determinants of health and mental health.

3

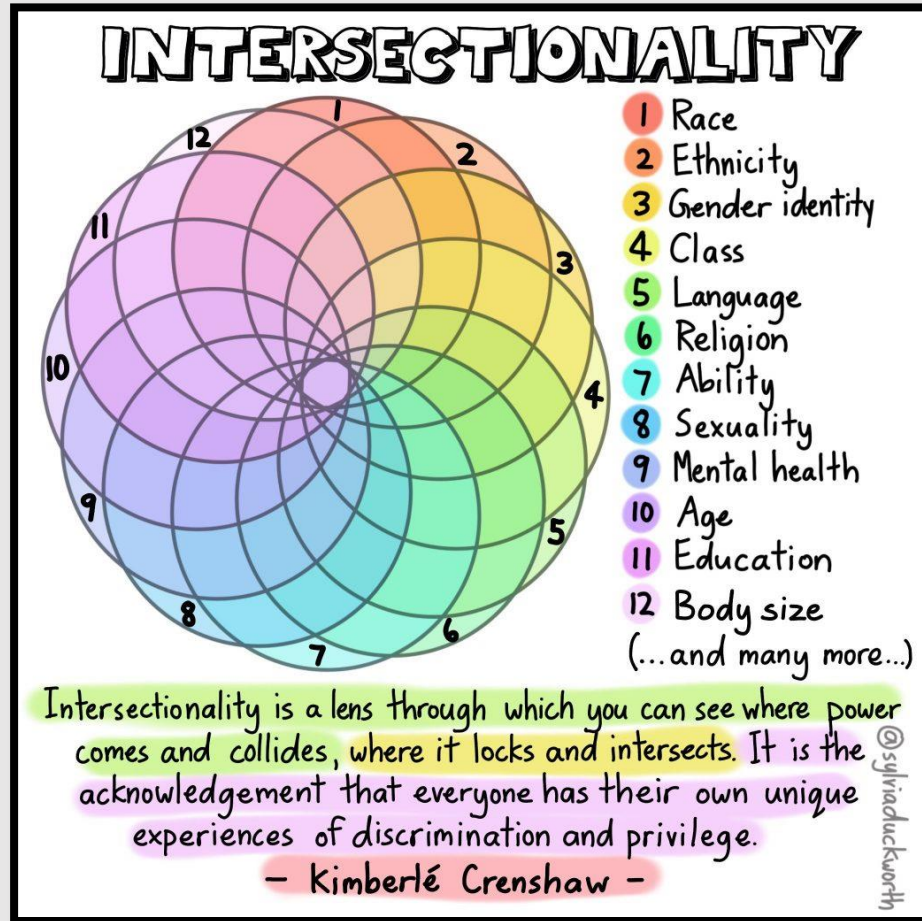
Explore the nexus of the challenges associated with adherence.

4

Recognize the effect of an “triple diagnosis.”



WHY USE AN INTERSECTIONALITY LENS?



Intersectionality is **the acknowledgement that everyone has their own unique experiences of discrimination and oppression**, and we must consider everything and anything that can marginalize people – gender, race, class, sexual orientation, physical ability, etc.

Intersectionality recognizes that identity markers (e.g., woman and Black) do not exist independently of each other, and that each informs the other.

Some factors associated with intersectionality include:

Race, gender, SES, disability, age, and education.

New HIV Diagnoses Among Adults and Adolescents in the US and Dependent Areas by Race/Ethnicity, 2020

New HIV Diagnoses Among Adults and Adolescents in the US and Dependent Areas by Race/Ethnicity, 2018	
Race or Ethnicity	Number of Diagnoses
American Indian/Alaska Native	200
Asian	635
Black/African American	12,827
Hispanic/Latino	7,999
Native Hawaiian and other Pacific Islander	65
White	7,831
Multiracial	792

HIV and Black/African Americans

Black/African American people account for a higher proportion of new [HIV diagnoses](#) and people with HIV, compared to other races and ethnicities. Racism, HIV stigma, homophobia, poverty, and barriers to health care continue to drive these disparities. CDC, 2019



Prevention Challenges:

Low
percentages of
viral suppression

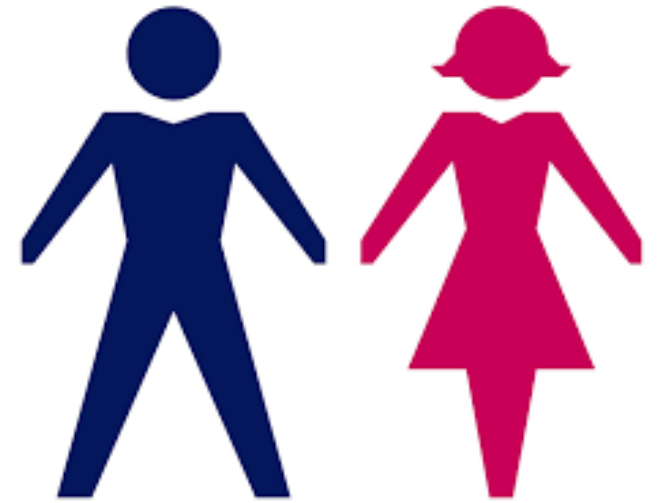
Mistrust in the
Health care
system

Other sexually
transmitted
diseases

WHAT MAKES A WOMAN VULNERABLE TO HIV?

BIOLOGICALLY, WOMEN ARE MORE VULNERABLE THAN MEN TO INFECTION BECAUSE OF THE GREATER MUCUS AREA EXPOSED TO HIV DURING PENILE PENETRATION.

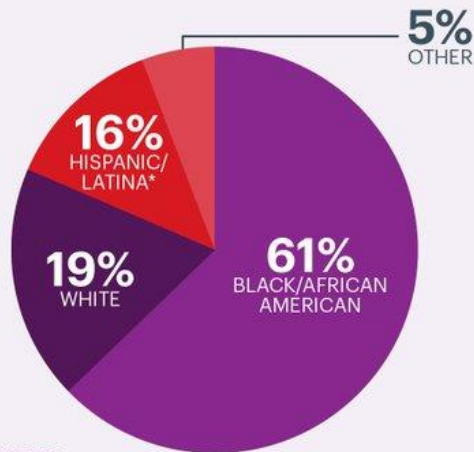
YOUNG WOMEN UNDER AGE 17 YEARS ARE AT EVEN GREATER RISK BECAUSE THEY HAVE AN UNDERDEVELOPED CERVIX AND LOW VAGINAL MUCUS PRODUCTION.



HIV among Black Women

- African American women & girls account for 59% of new HIV diagnoses in 2018
- Black women in the south acquire HIV at almost 20 times the rate of their white counterparts
- 86% of new HIV cases among Black women in 2017 were due to *heterosexual contact*
- 1 in 48 Black women will acquire HIV with current trends
- Over 10 million new Sexually Transmitted Infections affect individuals aged 15-24, which includes college-age African American women

NEW HIV DIAGNOSES AMONG **WOMEN & TEEN GIRLS**



*Hispanics/Latinas can be of any race.
Based on the latest data available in February 2018.



WOMEN LIVING WITH HIV EXPERIENCE DEPRESSION, ANXIETY, AND POSTTRAUMATIC STRESS SYMPTOMS AT HIGHER RATES THAN THEIR MALE COUNTERPARTS AND MORE OFTEN THAN HIV-UNAFFECTED WOMEN. (WALDRON ET AL., 2021 – MENTAL HEALTH IN WOMEN LIVING WITH HIV: THE UNIQUE AND UNMET NEEDS)





GOAL:

75%
reduction in new
HIV infections
by 2025
and at least
90%
reduction
by 2030.

www.hiv.gov

**Health begins where people live,
learn, work, play, and pray.**



**HIV, SUBSTANCE USE, AND MENTAL
HEALTH ARE INTERTWINED
EPIDEMICS WITH INCREASED
MORBIDITY AND MORTALITY.**

Substance Use

Substance use and abuse are common among HIV positive individuals, with nearly 50% of persons living with HIV/AIDS reporting current or past histories of drug or alcohol disorders.

Substance use is associated with key health behaviors and outcomes including non-adherence, immunosuppression, increased sexual risk behaviors, and increased burdens on health care systems.

Often, Persons living with HIV/AIDS tend to underutilize substance use treatment and this can be more pronounced in certain HIV seropositive subgroups including sexual minorities.

A history of substance use also has implications for care, with HIV infected individuals with substance use histories less likely to receive highly active antiretroviral therapies (HAART).

(Durvasula and Miller, 2014)

Substance Use

Substance abuse among HIV positive persons has been associated with nonadherence to HAART and other medications.

Alcohol use and drug use disorders are consistently associated with poorer HAART adherence, decreased health care utilization, and poorer immunologic and virologic outcomes.

Factors associated with non-adherence include poor health, comorbid psychiatric conditions, cognitive impairment, psychosocial factors, demographic factors, substance use and abuse, and health beliefs, as well as interactions between these variables.

Current substance users were over four times more likely to not adhere to medication than those not using illicit substances.

(Durvasula and Miller, 2014)

Social Determinants of Health (SDoH) Framework and Substance Use

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code / geography	Literacy Language Early childhood education Vocational training Higher education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination Stress	Health coverage Provider availability Provider linguistic and cultural competency Quality of care
Health Outcomes Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations					



- Health and well-being are shaped by many factors beyond the healthcare system, including conditions that make up social, economic, and the physical environments — known as the SDoH.
- SDoH not only affect our physical, but they also can have an impact on a person's mental health, substance use, and misuse of alcohol and drugs.
- Of note, the SDoH are in turn shaped by a wider set of forces which include economics, social and public policies, and politics. (WHO, 2008)

Social Determinants of Health (SDoH) Framework and Substance Use

- **Social and economic factors that impact substance use:**
- **Social factors:**
 - Unhealthy relationships
 - Family conflict
 - Family history of substance use/abuse
 - Unemployment
 - Poverty
 - Homelessness
 - Neighborhood
 - Historical trauma

Residential Segregation and Injection Drug Use Prevalence Among Black Adults in US Metropolitan Areas

Hannah L. F. Cooper, ScD, Samuel R. Friedman, PhD, Barbara Tempalski, PhD, and Risa Friedman, MPH

As recognized by the National Institutes of Health,¹ identifying the determinants of injection drug use among Black adults is important for public health, given the substantial and persistent overrepresentation of Black Americans among people diagnosed with injection-related health problems, including HIV/AIDS and fatal illicit drug overdoses.²⁻¹¹ Structural factors, including racial residential segregation, have been hypothesized to be potent determinants of drug use patterns among Black individuals, and, in fact, some have suggested that such factors play a more important role in determining drug use among Blacks than among Whites.¹²⁻²³

Few studies, however, have pursued related lines of inquiry.^{18,23-25} This omission is striking when placed within the broader context of public health, a discipline that has increasingly emphasized the structural determinants of health and health-related behaviors.²⁶⁻²⁹

Objectives. We analyzed the relations of two 1990 dimensions of racial residential segregation (isolation and concentration) with 1998 injection drug use prevalence among Black adult residents of 93 large US metropolitan statistical areas (MSAs).

Methods. We estimated injection drug use prevalence among Black adults in each MSA by analyzing 3 databases documenting injection drug users' encounters with the health care system. Multiple linear regression methods were used to investigate the relationship of isolation and concentration to the natural logarithm of Black adult injection drug use prevalence, controlling for possible confounders.

Results. The median injection drug use prevalence was 1983 per 100 000 Black adults (interquartile range: 1422 to 2759 per 100 000). The median isolation index was 0.48 (range: 0.05 to 0.84); in half the MSAs studied, the average Black resident inhabited a census tract where 48% or more of the residents were Black. The multiple regression model indicates that an increase of 0.50 in the isolation index was associated with a 23% increase in injection drug use prevalence among Black adults. Concentration was unrelated to the outcome.

Conclusions. Residential isolation is positively related to Black injection drug use prevalence in MSAs. Research into the pathways linking isolation to injection drug use is needed. (*Am J Public Health*. 2007;97:344-352. doi:10.2105/AJPH.2005.074542)

research has yet investigated the association of segregation with injection drug use prevalence.

Our examination of the relation of each of 2 segregation dimensions to injection drug

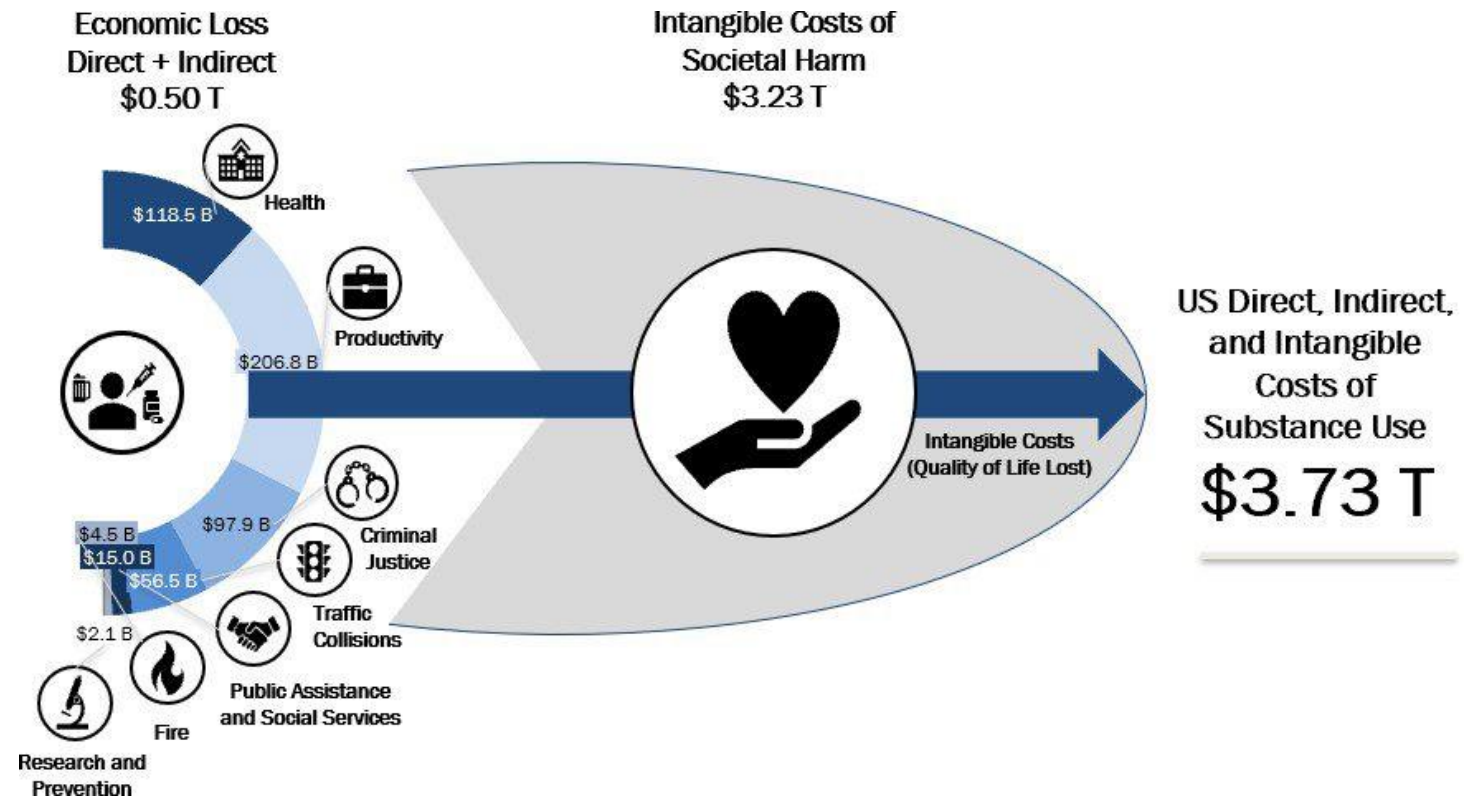
HISTORICAL TRAUMA

Structural factors that impact substance use/abuse in the general population testifies to the relevance of the structural determinants associated with substance abuse: rates of unemployment, poverty, arrest, and neighborhood disorder. Research have these factors to be linked with patterns of IDU, heroin, and cocaine use.

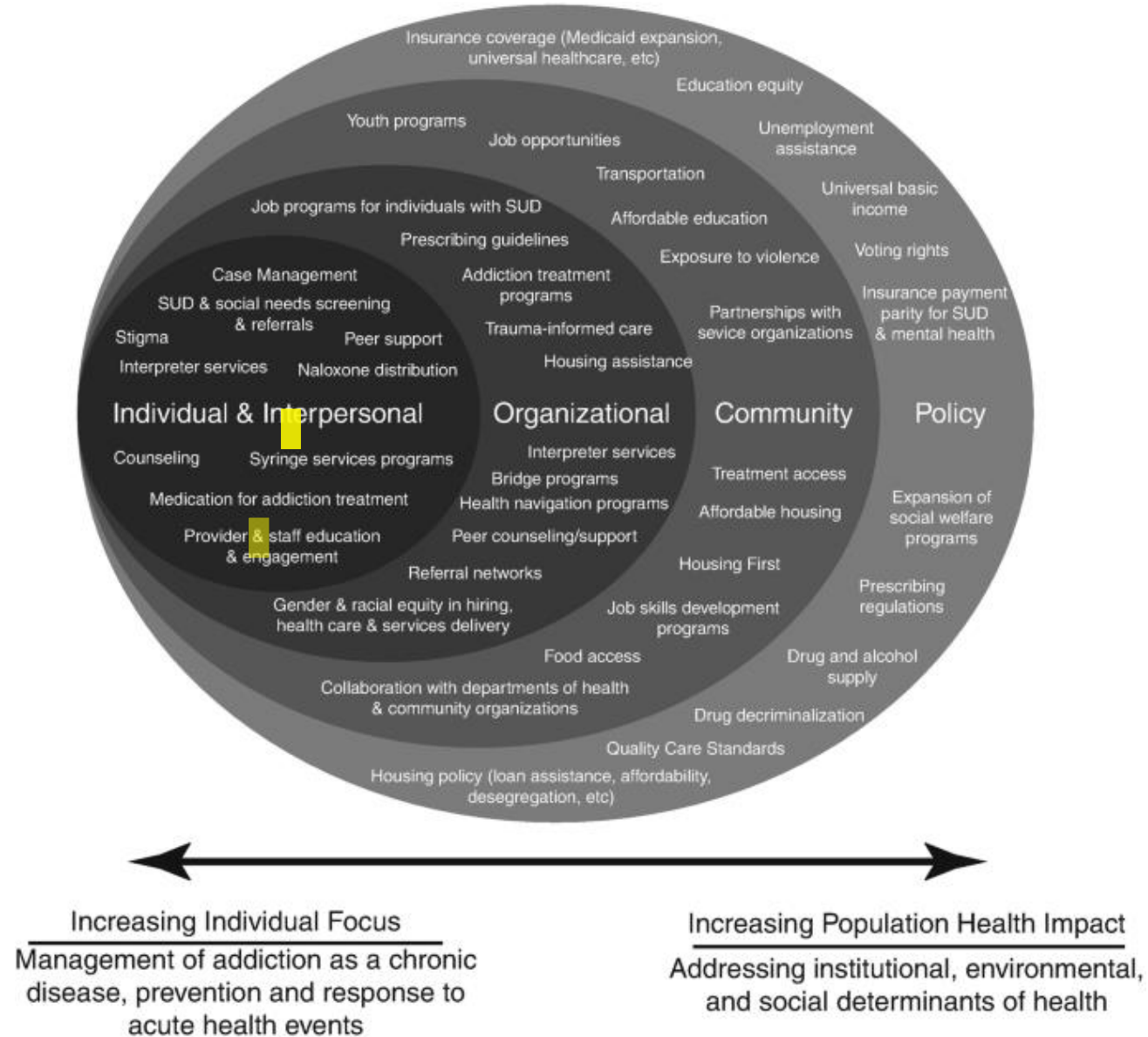
Social Determinants of Health (SDoH) Framework and Substance Use

- **Economic factors individual level:**
 - Poverty/economic disadvantage (driver)
 - Job loss
 - Unemployment rates associated with higher rates of alcohol and substance use
- **Cost to the Society:**
 - Premature death
 - Theft and violence
 - Sexual assault
- **Annual cost of substance abuse in U.S.**
 - approximately **\$373 trillion dollars** (Recovery Centers of America, 2019)

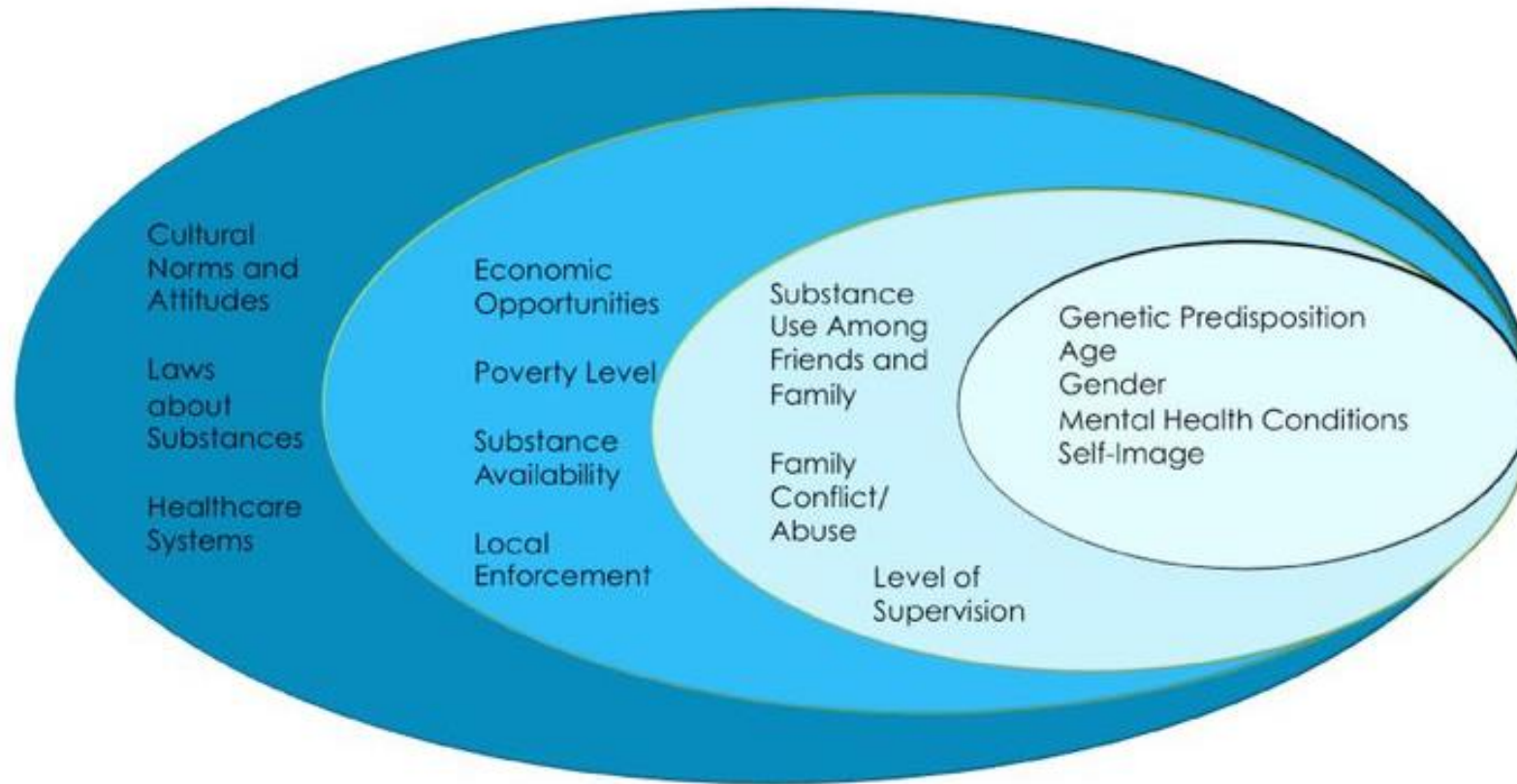
Economic Cost of Substance Abuse Disorder in the United States (2019), Summary View



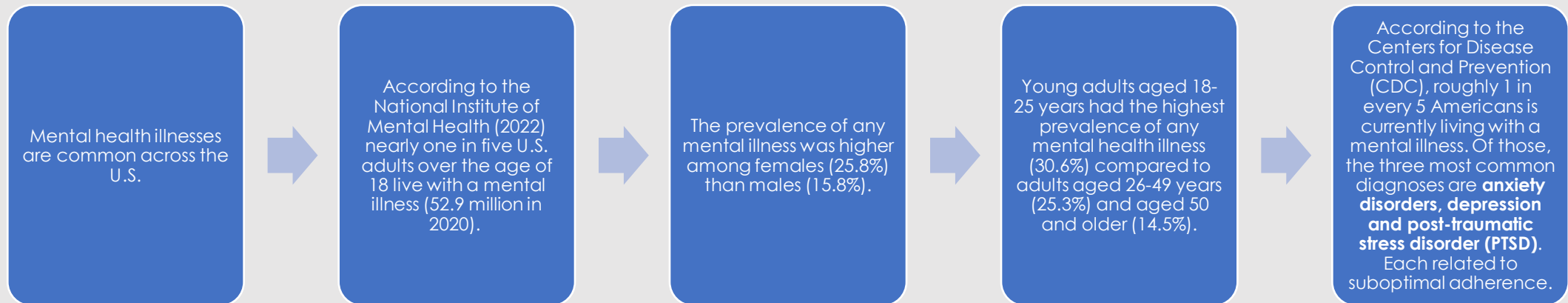
Socio-ecological model & Substance Abuse



Social Determinants of Addiction



Mental Health



- Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices, (CDC, 2021).
- More than 50% will be diagnosed with a mental illness or disorder at some point in their lifetime, (CDC, 2021).
- 1 in 25 Americans lives with a serious mental illness, such as schizophrenia, bipolar disorder, or major depression, (CDC, 2021).

Mental Health

◦ **What causes mental illness?**

- There is no single cause for mental illness. A number of factors can contribute to risk for mental illness, such as
 - Early adverse life experiences, such as trauma or a history of abuse (for example, child abuse, sexual assault, witnessing violence, etc.)
 - Experiences related to other ongoing (chronic) medical conditions, such as cancer or diabetes
 - Biological factors or chemical imbalances in the brain
 - Use of alcohol or drugs
 - Having feelings of loneliness or isolation
 - Historical trauma

Causes of Mental Health

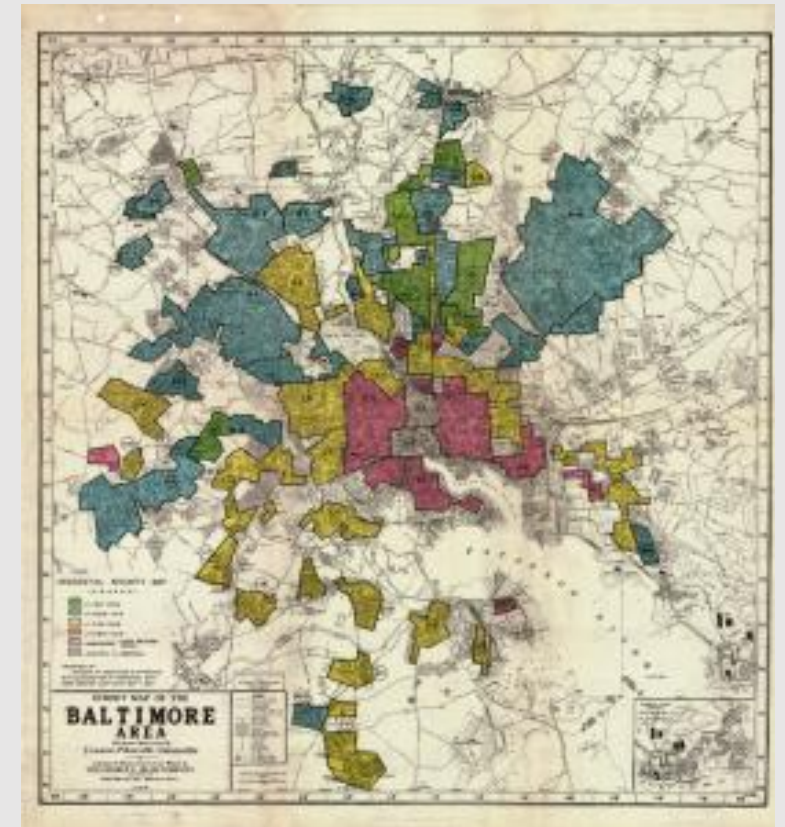
Mental Health and Historical Trauma

- In the 1930s, the federal government, seeking to stabilize the housing market and improve financial conditions for homeownership in the midst of the Great Depression, created the Federal Housing Administration.
- For some families, these policies created access to capital and possibilities for generational accumulation of wealth.
- However, these policies and programs also systematically excluded people of color and immigrant communities, thereby promoting segregation and disinvestment in these communities.
- Baltimore passed a 1910 city ordinance aimed at preventing Black people from living anywhere near White people.



Mental Health and Historical Trauma

- Key factors identified in Baltimore included patterns of neighborhood change (i.e., gentrification, displacement, and blockbusting) and neighborhood investment levels.
- Patterns of gentrification and displacement have resulted in what is referred to as the “Black Butterfly”—areas of segregated Black communities fanning out to the east and west, delineated by the wealthier, whiter areas along the waterfront, along the Charles Street corridor, and to the north.
- HOLC grades are based on 4 levels, green = most desirable, blue = still desirable, yellow = definitely declining, and red = hazardous, and unsafe.
- **The models indicate a significant association between HOLC grade and current poor mental health prevalence in HOLC-graded cities.**
- Ample literature has described the linkage between racial residential segregation and racial health inequities, including for disparate outcomes related to cardiovascular disease, hypertension, diabetes, and asthma and mental health.



Mental Health and Substance Use/Abuse

- **Mental health problems and substance use disorders sometimes occur together. This is because:**
 - Certain illegal drugs can cause people with an addiction to experience one or more symptoms of a mental health problem.
 - Mental health problems can sometimes lead to alcohol or drug use, as some people with a mental health problem may misuse these substances as a form of self-medication.
 - Mental and substance use disorders share some underlying causes, including changes in brain composition, genetic vulnerabilities, and early exposure to stress or trauma.

Mental Health and Substance Use/Abuse

- **According to the Results from the 2020 Survey on Drug Use and Health:**
 - Among adults aged 18 or older in 2020, those with SMI or AMI in the past year were more likely than those with no mental illness in the past year to be past year users of illicit drugs (47.8 percent for adults with SMI and 39.8 percent for adults with AMI vs. 17.0 percent for adults with no mental illness).
 - Similar to adolescents, most adults aged 18 or older in Quarter 4 of 2020 perceived at least some negative effect of the COVID-19 pandemic on their mental health, including about 1 in 5 (18.3 percent or 45.2 million people) who perceived that the COVID-19 pandemic negatively affected their mental health “quite a bit or a lot.” Adults with AMI or SMI in the past year were more likely than those who did not have mental illness in the past year to perceive that the COVID-19 pandemic negatively affected their mental health “quite a bit or a lot.”

Triple Diagnosis among People Living with HIV

Some of the issues involved in people with a triple diagnosis include ongoing substance abuse, increased psychological distress and potentially poor adherence to medical treatment regimen.

These co-occurring disorders may be associated with greater morbidity and mortality.

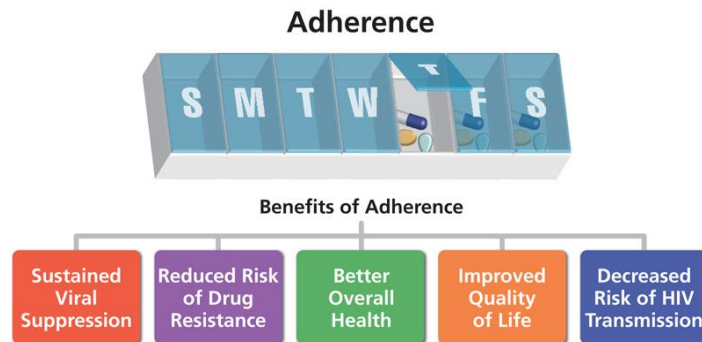
Any of the three elements of this "triple diagnosis" may be associated with poor judgment, high-risk behavior, and impulsivity.

Triple-diagnosis patients may also face unemployment, poverty, poor housing, legal problems, and lack of social support, among other difficulties.

People with triple diagnosis mostly require a multipronged approach to care.

HIV Medication Adherence

- **Potential Barriers: (Must discern modifiable and unmodifiable barriers in order to establish sustainable adherence).**



- Forgetting to take medications
- Starting treatment ASAP (as soon as diagnosed)
- Culturally appropriate HIV education and treatment
- Continuity of care
- Tolerability/convenience of the regimen
- Patient /provider relationship
- Ancillary services for those newly diagnosed
- Keep in mind that the SDoH are associated with greater diseases among marginalized communities
- Stigma and systematic bias
- Health literacy
- Stress, & mental health
- Fully understanding the perceived risk among the population (e.g., unemployment, access to healthcare, access to transportation, food, housing instability, sexual orientation, social isolation, poverty, and violence)
- Alcohol & drugs
- Who benefits from science

Pathways of Structural Violence that Impede HOV Medication Adherence

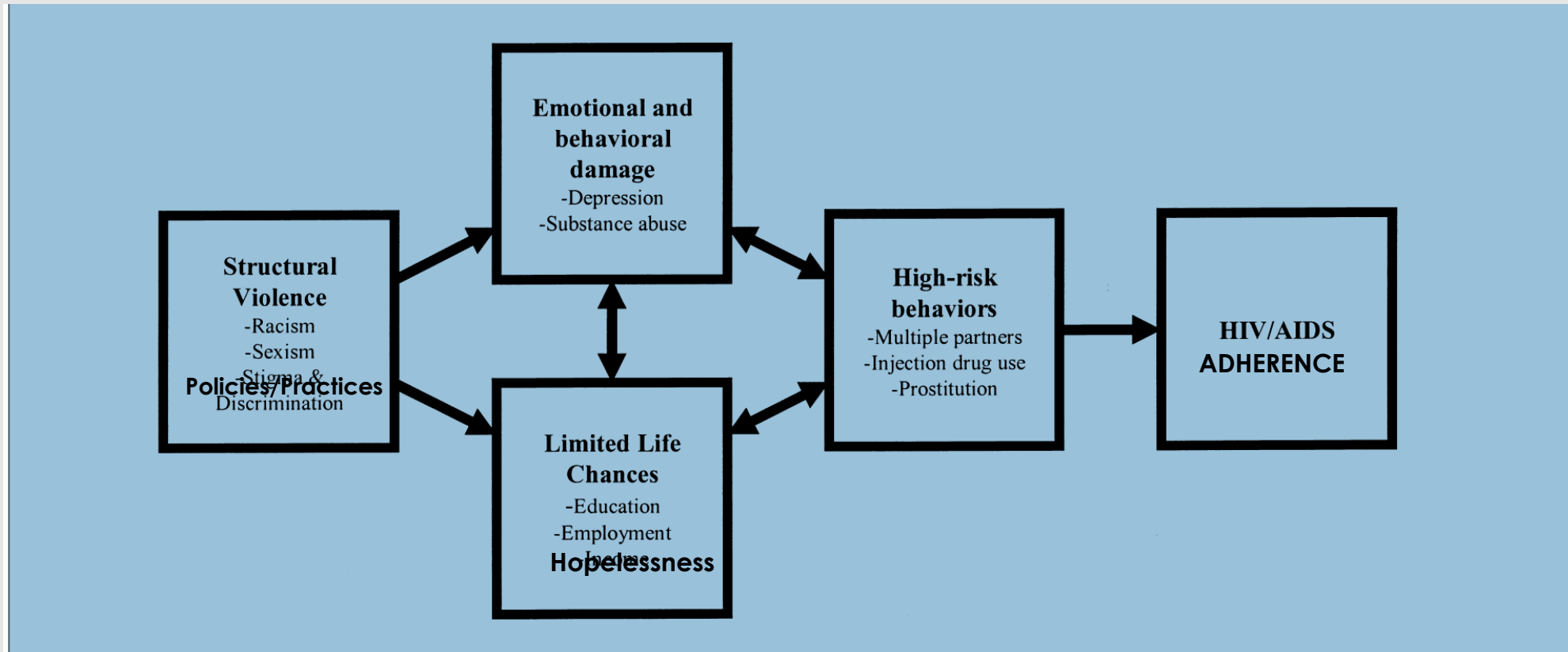


FIGURE 2. Pathways through which various forms of structural violence might influence the risk of human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS).

Most Who Need Treatment for Substance Use Disorders Don't Receive Any

1 million people

In 2019, 21.6 million people needed treatment...



but just 2.6 million received any.

Americans Not Seeking Mental Health Care

+ Share of Americans who live with a mental illness

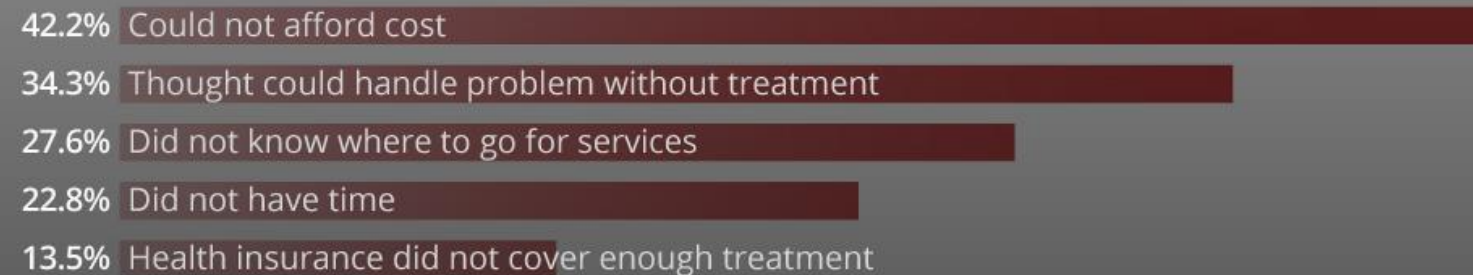


1 in 5 adults in the U.S.
experience mental illness



1 in 25 adults in the U.S. live with
a serious mental illness

+ Reasons for not receiving mental health services among U.S. adults in 2017*



@StatistaCharts

* Poll conducted between April 20 and May 4, 2018
among 1,000 US respondents online

Sources: World Economic Forum; National Survey on Drug Use and Health

statista

Behavioral Health Baltimore, 2018

Baltimore population 2018: 602,495

Outpatient Services

87%

65,700 people received outpatient mental health and substance use treatment services



56,482

people accessed mental health services

35,023

people accessed substance use disorder services

27,670

people accessed both mental health and substance use disorder services

Behavioral Health in Baltimore: By the



Q AND A

