

“Crossing Paths” – The Intersection of STIs and Emotional/Mental Health

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Disclosures

- None

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- Cindy Truong, MPH

Overview

- The “fallout” – after the STI diagnosis
- Mental health factors contributing to STIs
- Integration of mental health screening with STI screening in clinical settings

Traditional Approach

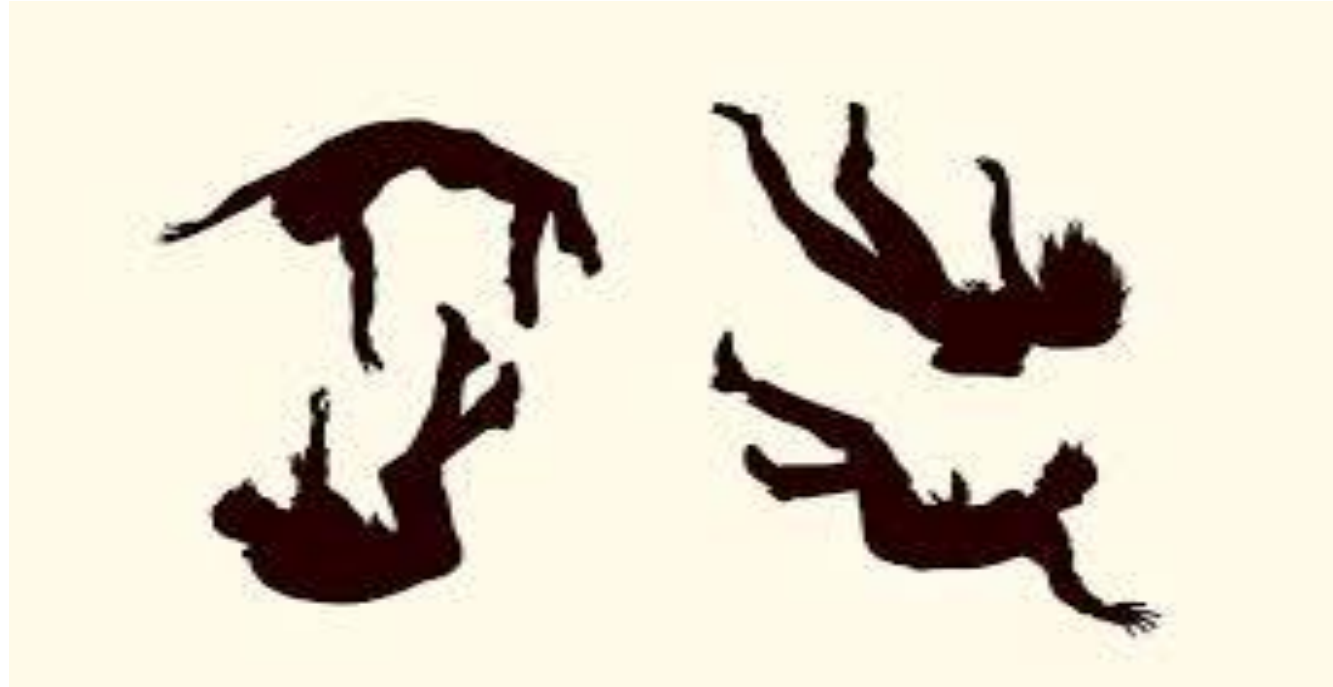
- Providers are busy
- Focused on getting information
- Making the right dx
- Arranging for the appropriate treatment
- Providing brief education and counseling
- And then...on to the next patient...



Strategies

- But...providers need to be aware...
- That there is more to STI treatment and management than just making the dx and providing treatment
- There are significant affective components involved in working with patients with STIs that need to be acknowledged and addressed

The “Fall Out”



Context

Research conducted in the UK highlights that 91% of individuals believe that an **STI diagnosis** would **negatively impact** various aspects of their lives, including their **mental health**, relationships, social life, confidence, and even their careers.



What Happens After Getting an STI Diagnosis?

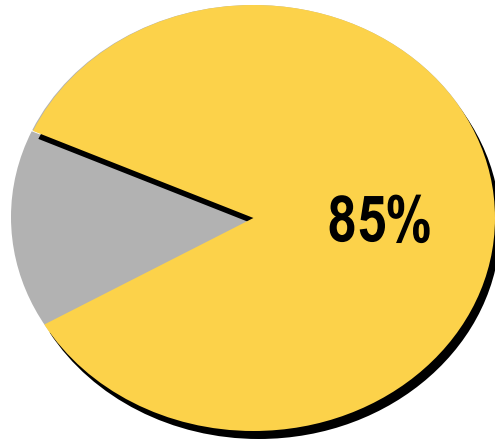
- Patients frequently describe feeling “numb”...or being dis-associated
- An “out-of-body” experience



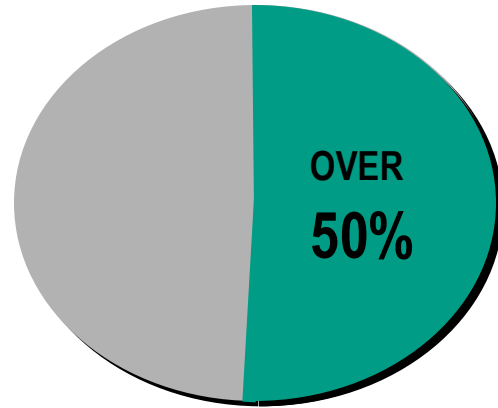
Strategies

- We may want and need to provide important messages re: treatment, future prevention, EPT etc.
- Patient may not be “able” to “hear” and act on those messages

Provider-Patient Relationship & Communication Keys to Overall Outcomes



85% of patients don't fully understand what the doctor tells them.



Over 50% of patients leave the office unsure of what they are supposed to do.

- Source: Kaplan SH, et al. *Med Care*. 27(3 Suppl):S110-S127.
- Ong L. et al. *Soc Sci Med* 1995

Strategies

- So providers may need to allow time for the patient to recover their balance
- We may need to initially streamline communication and provide only 1-2 basic “chunks” of information...and then ask the patient to repeat the information back to us to ensure receipt and understanding
- Depending on clinical structure, may need have other clinical staff (health educators, prevention counselors, nurses etc.) spend additional time with patient as we go on to see someone else
- And, we may need to follow up by phone/video chat within the next day or so to ensure that information has been understood and processed

Strategies

- May need to use different modalities for reinforcement (brochures, flyers, videos, websites)

After the STI Diagnosis

- “How could I have been so stupid?”
- “Why did I trust him?”
- “I feel so...dirty”
- “My life is ruined”
- “No one will ever want me”
- “I will never have sex again”



Herpes***



Herpes

- ***“I feel like I’m radioactive...and that everyone can see right through me...that I am damaged goods...who’s gonna want me?”***



After the STI diagnosis...

Anger

- ***“I’m gonna kill the b_____ that gave this s_____ to me”***



Impact

- Not just blowing smoke....

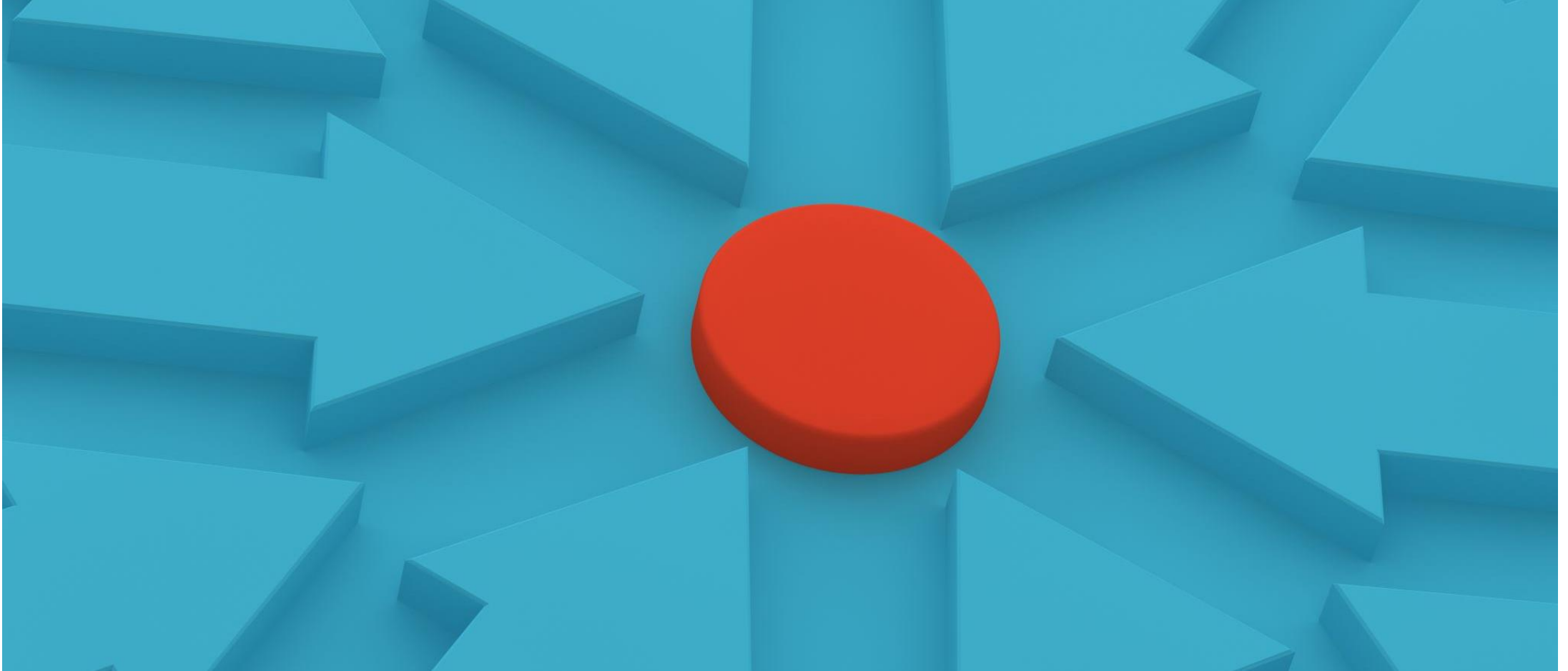


After the STI diagnosis

Fear



IMPACT of Providers



Sometimes...

- Sometimes...providers add insult to injury...

Providers and Patients

- Janet presents for a “check up.”
Had unprotected sex yesterday with a male partner
- ***“You’re only 18 and you’ve had 5 partners already. Don’t you know that you are living in one of the STD/HIV epicenters of the world? How could you be so careless? What’s wrong with you????”***



Providers and Patients

- “Slut-shaming”
- Criticizing a patient for number of sex partners, sexual practices (condomless sex) etc.
- 25% of Ob-gyn providers expressed disapproval of patient’s sexual practices



• Sobecki J et al 2012



“The Feeble Five”...

- **Judging**
- **Lecturing**
- **Threatening**
- **Preaching**
- **Blaming**

Providers and Patients

- Why do some providers approach patients in this way?

Rationale?

- Providers may be genuinely concerned about patient's well-being
- **Intent** may be to “sound the alarm” and curtail risky behavior
- However, **impact** may be...
- Patients perceive that the physician intentionally made them feel bad ...which adds to their feeling of shame and embarrassment



- 50% of a sample of adult respondents stated that physicians made them feel ashamed of their behaviors
- 45% reacted negatively
 - Avoid subsequent visits
 - With-holding information
 - Terminating relationship with physician*
- Female patients were more likely to report shaming experiences and negative reactions

• Harris C et al 2009

Case History

- Jennie, 19 yo female, heterosexual, college student, 3 partners in past year
- Comes in for routine exam after spring break
- No symptoms
- HIV, RPR, GC, trich Neg
- CT(+)

Strategies

Sample script:

- *“Jennie, from the look on your face it seems like this chlamydia diagnosis came as quite a shock to you...Take a deep breath and tell me about your concerns...then I will share with you a little about chlamydia. I will also give you something to take home and read about it...and then we pick another time to talk further.”*



Strategies

- Written materials
 - Allow patients to absorb information at a later date when they are more composed
 - But...must be appropriate in terms of health literacy
- Web-based materials
 - May be more discrete
 - Can incorporate audio and video to attend to different learning styles

Strategies

Shame/embarrassment

- Need time to ventilate or just ...sit
- “Normalize”
- Provide education and support

Strategies

Sample script

- ***“Jennie, I hear you when you tell me that you feel ashamed and embarrassed about having to deal with Chlamydia. To be honest with you, this is a very common infection that many people have. It does not mean you are a “bad” or “dirty” person. Things happen sometimes. Let’s talk a little about what we can learn from this experience and put steps in place, so it does not happen again. We are here for you”***

Strategies

Anger

- Allow patient to ventilate
- Provide specific education and counseling about asymptomatic nature of most STIs

Strategies

Sample scripts:

- ***“Jennie, I understand that you are very upset right now that someone passed this infection on to you. Real talk, most people who have Chlamydia have no symptoms... and are not aware that they have an infection. So, that could have been the case with your partner/s. You did the right thing by coming in for a routine check-up and discovering this infection. So, in addition to making sure you get treated, we need to make sure that your partners get the information they need to also get checked and treated and cured. This is important, not only for their health, but for anyone else that they become involved with. Can we talk about how we can make that happen?”***

Strategies

- Fear
- ***“I know I need to let the guys I’ve been with know they need to get checked. And, I think for most of them it will be no big deal...but I’m concerned about this one guy. What if he goes off?”***

 **STDcheck.com**
More Than 2,000,000 Tests Performed!

HomeFind a Lab ▼How It Works ▼Price

⚡ Get lightning fast results in only 1-2 days

Anonymous STD Text Notification

Send Anonymous Notification by Phone or E-mail

☒ Phone ☐ E-mail

Phone Number:

(xxx) xxx-xxxx

Here is the content of the notification text message:

“STDCheck.com - A sexual partner tested positive for an STD & recommends that you also get tested. For details, visit STDcheck.com/notify.php Text STOP to Opt Out”

 Send Text

Anonymous STD Text

Send a text message or email to let your partner know it is time to get tested

Strategies

- Refer for support/intervention

Part One Summary

- Receiving an STI diagnosis can be traumatic
- There can be an affective component that lasts long after the infection has been managed
- May have implications for self-esteem and psychological well-being
- May have an impact on relationships
- Providing support for patients is important

Part Two

- Mental Health – Contributing factors to STIs

Prevalence of Mental Health Issues



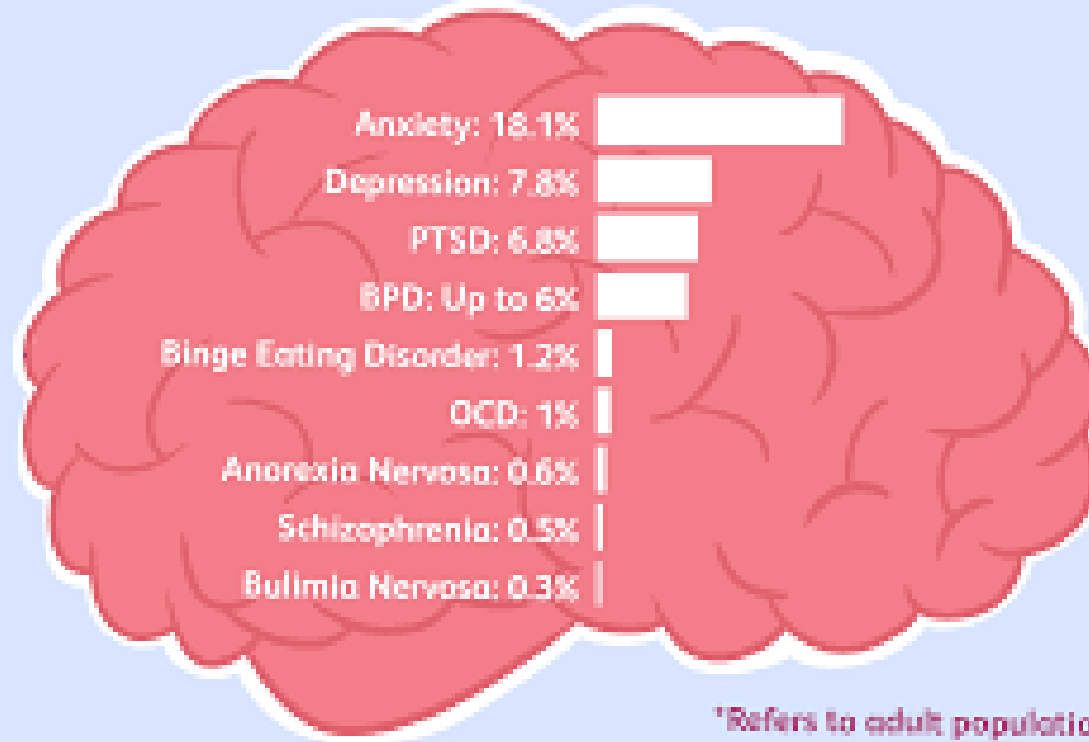
MH Screening

- May represent an undercount
- <3% of patients seen in primary care settings are screened for common mental health conditions such as depression

• Harrison D et al. Primary Care Companion J Clin Psychiatry 2010

Background

The Prevalence of Mental Illness in the United States



Background

- Approximately half of all lifetime mental illnesses begin by age 14, and a significant portion of these issues emerge by age 24



Background

- Adolescents and young adults represent almost half of the population affected by STIs each year



General Principles

- MH patients may be at increased risk for STIs
- May exert less conscious control over sexual interactions due to feelings of worthlessness, restlessness, boredom, or anxiety

General Principles

- Patients with mental health conditions may try to create distance from “noxious” sensations by engaging in behaviors that are pleasurable = such as sex

General Principles

- Patients with MH conditions may attempt to “self-medicate” by using alcohol and various substances...which may contribute to the risks of acquiring an STI

Co-Morbidities

- 7.6% of U.S. adults experienced a co-occurring substance use disorder and mental illness in 2021 (19.4 million people)



“When a Tornado Meets a Volcano...”



Intersectionality – MH and STIs

MH and STIs Review

- Analysis of 289,04 patients from MarketScan database of private insurance claims
- 36,032 patients or 12% had at least 1 claim for a MH diagnosis
 - Most commonly for depression and adjustment disorders
- 1969 patients (0.7%) had at least 1 claim for an STI diagnosis
 - Most commonly for herpes, HPV, PID, GC and NGU

MH and STIs Review

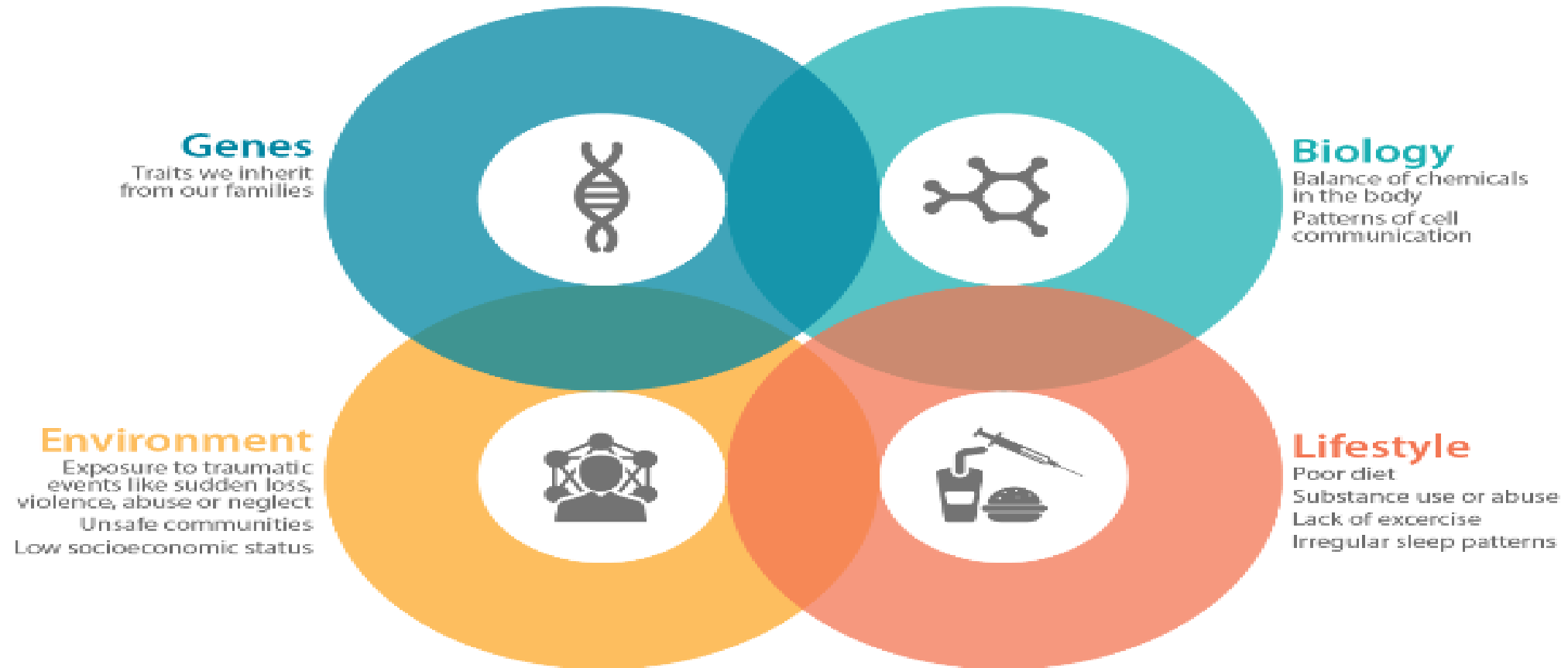
- 597 patients had both a MH and a STI dx
- People with a MH diagnosis were more than **twice** as likely as people without a MH diagnosis to have an STI diagnosis in the same year
- People on anti-depressants were more than **twice** as likely to have an STI dx
- People on antipsychotic meds, bipolar conditions and substance abuse problems had the highest rates of STI diagnostic claims

MH and STIs Review

- 201 people attending a public STD clinic in Baltimore
- 45% had current mood or substance use disorders

Contributing Factors to MH

Risk Factors



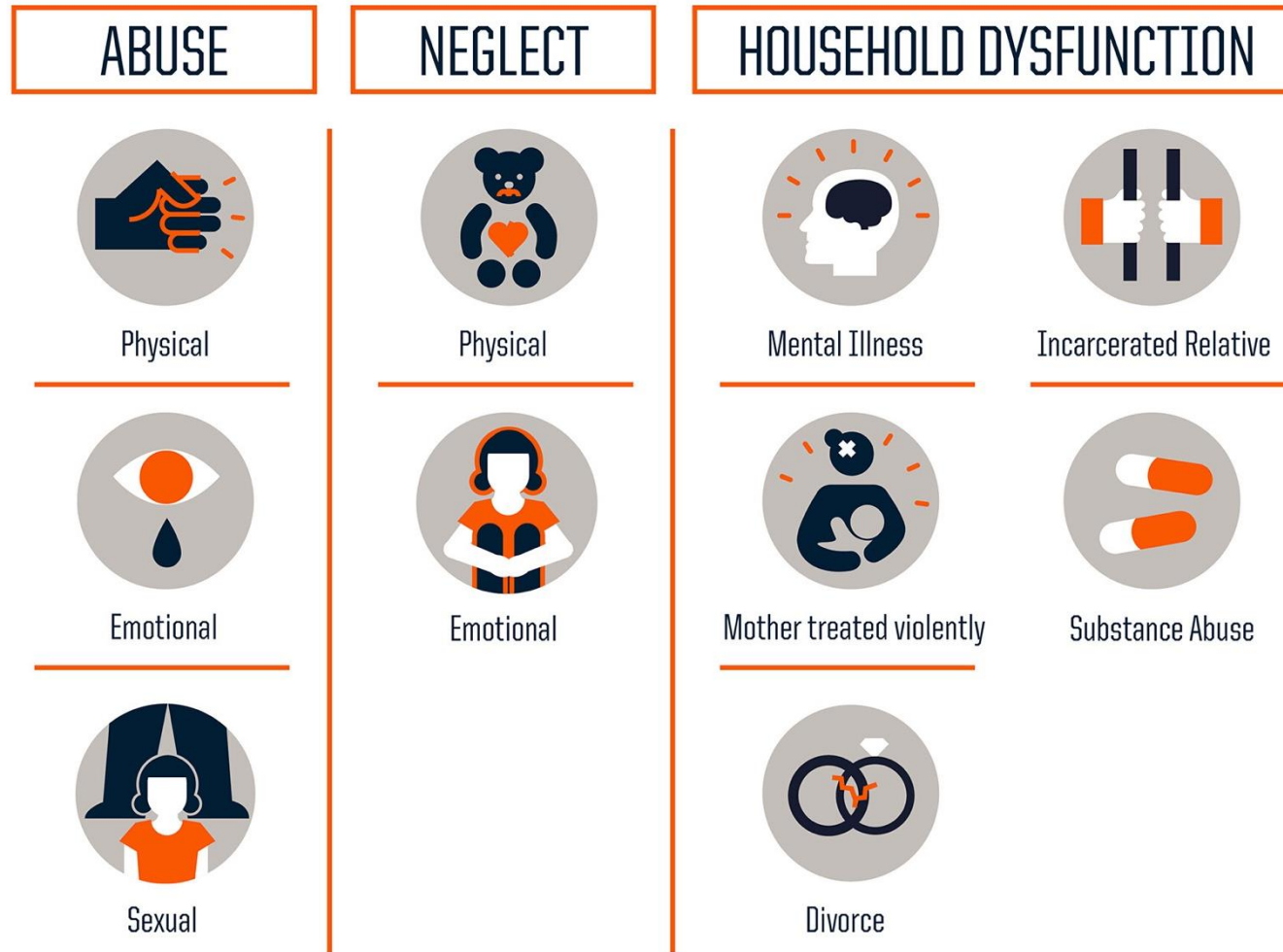
Contributing Factors

- Trauma

Adverse Childhood Experiences

- Adverse childhood experiences (ACEs) refers to potentially traumatic events that can have negative impacts on an individual's long-term health and well-being (Sacks, Murphey, & Moore, 2014).
- ACES scores range from 0 -10
- **~64% of the general population have at least one ACE**

Adverse Childhood Experiences



Original ACE Study

The ACE study revealed the following estimates:*

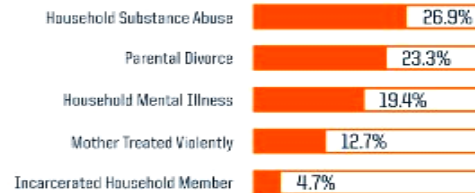
ABUSE



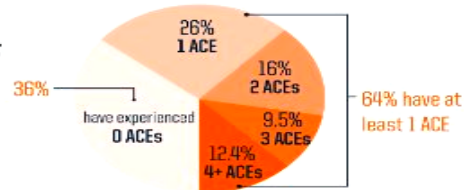
NEGLECT



HOUSEHOLD DYSFUNCTION



Of 17,000 ACE study participants:

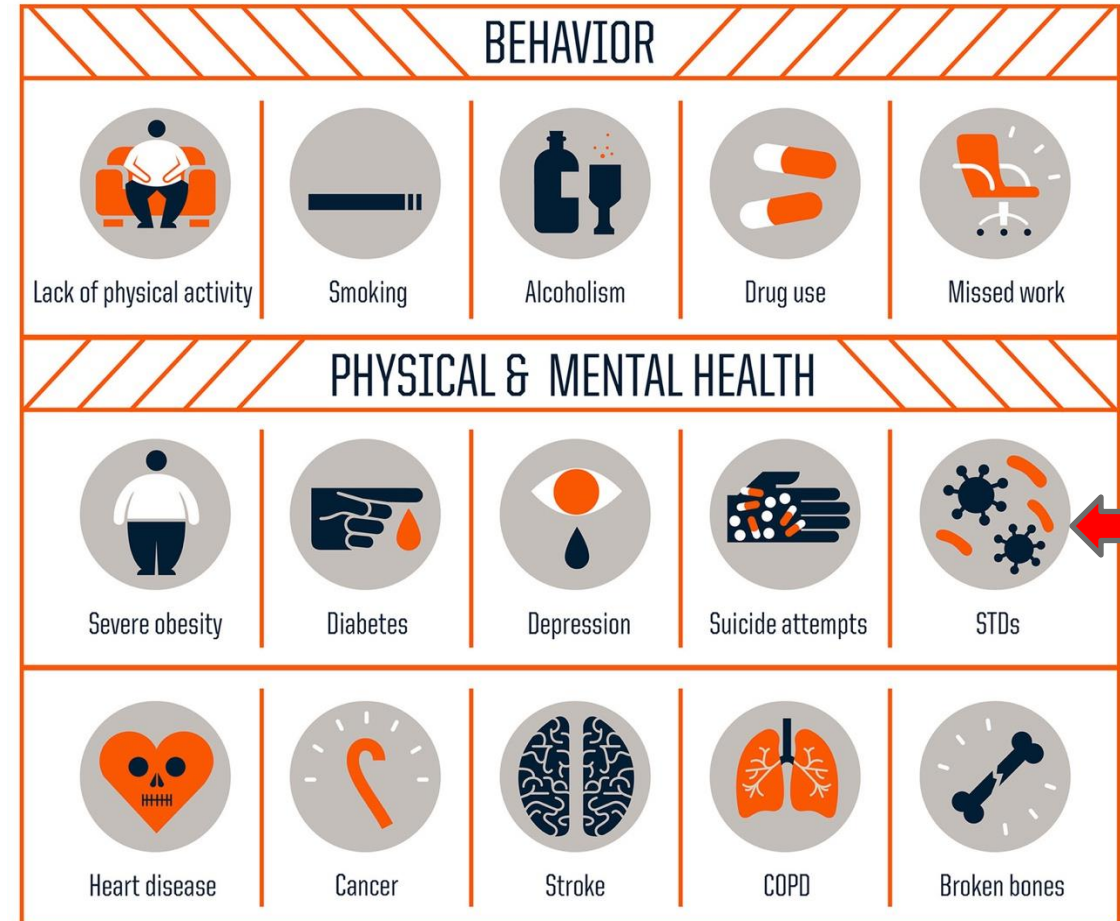


- The original study was conducted with predominantly white middle class individuals enrolled in the Kaiser Permanente Health Plan in California.

Impact of ACES

Adverse Childhood Experiences

- These outcomes have been connected with occurrence with ACEs.
- ACEs have a dose response relationship, meaning with each additional ACE there is an increased likelihood of the following negative health problems.



Sexual Debut

- Chronological age of first consensual sex act
- Individuals with ACES have an earlier sexual debut



ACES and Sexual Debut

- Sexual debut < 15 associated with:
 - Inconsistent contraceptive use
 - Inconsistent or nonuse of condom use
 - >2 partners in past 3 months
 - Multiple unintended pregnancies
 - Sexual coercion
 - IPV

- Magnusson et al 2012
- Kaplan et al 2013

ACEs

- 9323 adults attending Kaiser Permanente Clinics in California
- 50% had experienced at least one ACE
- Among women, likelihood of sex before age of 15 increased from an OR of 1.8 with one ACE to 7.0 for women with six or more ACES
- Likelihood of having > 30 LTSP increased from an OR of 1.9 for women with two ACES to 8.2 for women with six or more ACES

• Hillis S et al Pediatrics 2000

ACES and STIs

- Strong correlation between # ACES and lifetime history of STDs
- 11.6% of females and 17.1% of males with 3 ACES reported having an STD
- 20.7% of women and 39.1% of males with **6-7** ACES reported having an STD

• Hillis S et al Pediatrics 2000

ACES and STIs

- For those with > 6 ACES, the prevalence of STIs was **5 times** higher than for those who had no ACES

ACES and STDs – Contributing Factors

- ☐ Depression
- ☐ Anxiety
- ☐ PTSD
- ☐ Substance Use

STIs + MH + Substance Use

1557 patients attending an urban STD clinic were surveyed for co-morbidities

- Child sex abuse was reported by 50%
- 34% met the cut-off for depression using a standardized measure
- 56% reported recent binge drinking
- 46% reported recent marijuana use
- 38% report IPV
- 70% had multiple partners within past 3 months
- 24% were diagnosed with an STI at the clinic visit

Attention Deficit Disorder

- Neurodevelopment disorder that begins during childhood and often persists through adulthood
- 3 types
 - Inattentive
 - Hyperactive and impulsive
 - Combined

Attention Deficit Disorder

Compared to general population ...increased involvement in risky behaviors

- Smoking
- Substance Use
- Reckless driving

Attention Deficit Disorder

Compared to general population...

- Earlier age of first intercourse
- Higher # of sexual partners
- Higher risk of condomless sex

Attention Deficit Disorder

- Meta- analysis of 15 studies
- Increased risk of STIs overall
- Lower age of acquisition of first STI

• Soldatt L et al. J Psychiatr Pract 2024

Attention Deficit Disorder

Mediating factors:

- Impulsivity
 - Increased sensation seeking
- Impaired executive functioning
 - Difficulty in planning and organizing
 - Forgetfulness
- Substance use

Attention Deficit Disorder

- Individuals who were treated with psychostimulant medications...
- 31-41% decreased risk of STIs

Attention Deficit Disorder

Implications:

- Mental health providers caring for patients with ADD should educate their clients about the risks for STIs and refer for clinical services
- Clinical providers caring for patients with ADD should educate them about risks for STIs and provide screening and preventive services

Depression

- Since 2016, the US Preventive Task Force has recommended screening for depression in clinical settings



- Depression in adults: screening. U.S. Preventive Services Task Force. Jan. 26, 2016.. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/depression-in-adults-screening>

Depression

NLS Adolescent Health

- Home interviews 2232 males and 2506 females
- Baseline and 1 year follow-up
- CES-D screening tool
- Higher frequency of depressive symptoms at baseline predicted increased risk of acquiring an STI within the year
 - Moderate levels (5%); high (7%) for males
 - Moderate levels (7%); high (9%) for females

Depression

- Mediating factors:
 - Sex as a coping strategy – turning attention away from depressive feelings onto more pleasant activities
 - Poor impulse control, impaired judgement, lack of knowledge or understanding about risk
 - Affective disorders often associated with substance use

MSM

- High rates of HIV and STIs – particularly Syphilis and GC

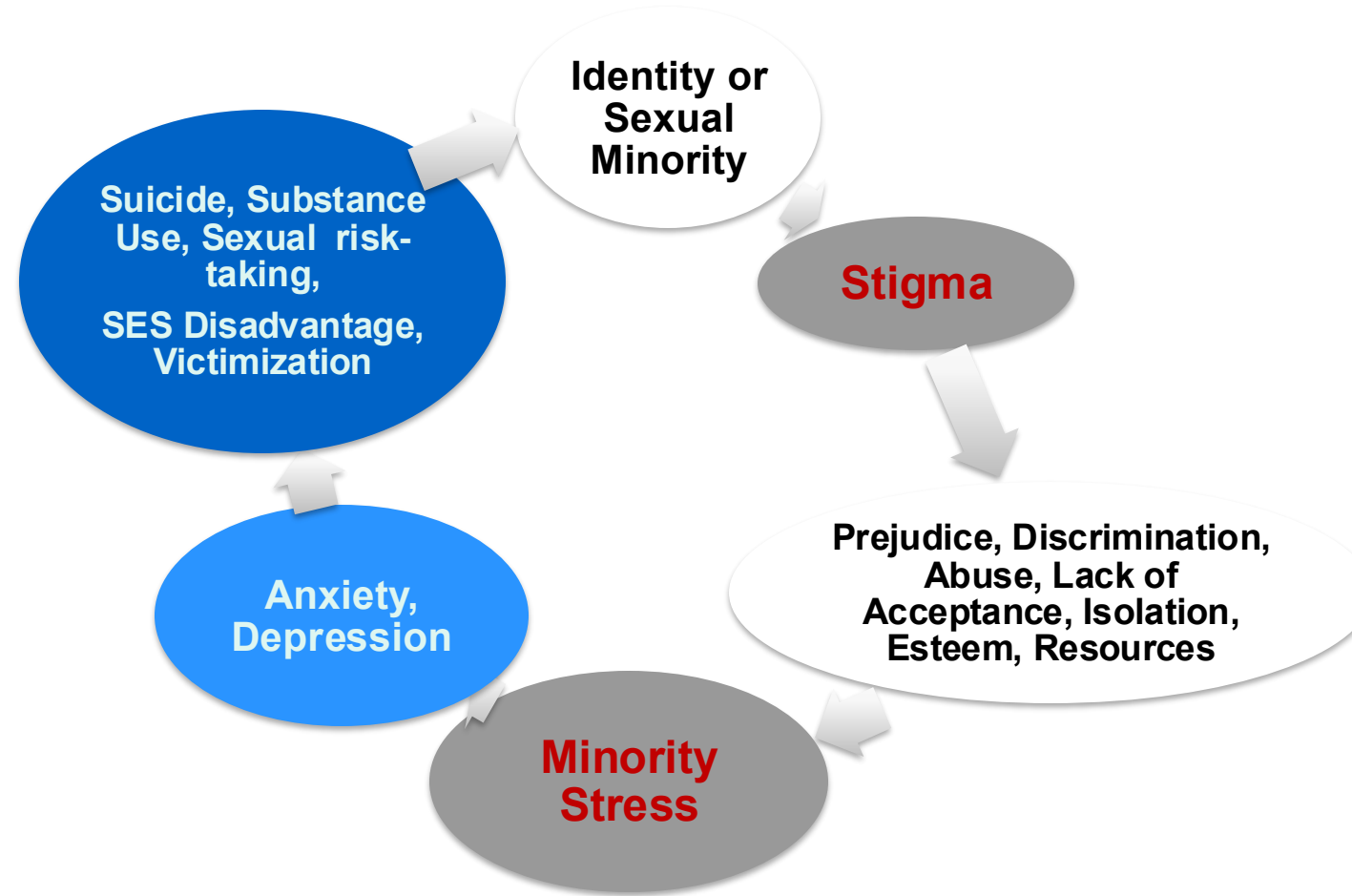
MSM and ACEs

- American Men's Internet Study (AMIS) – annual cross-sectional online survey of MSMs living in the US
- >3000 individuals surveyed btw Sept 2017-April 2019
- Close to 80% reported at least one ACE exposure
- Significant association with condomless anal intercourse and substance use

MSM

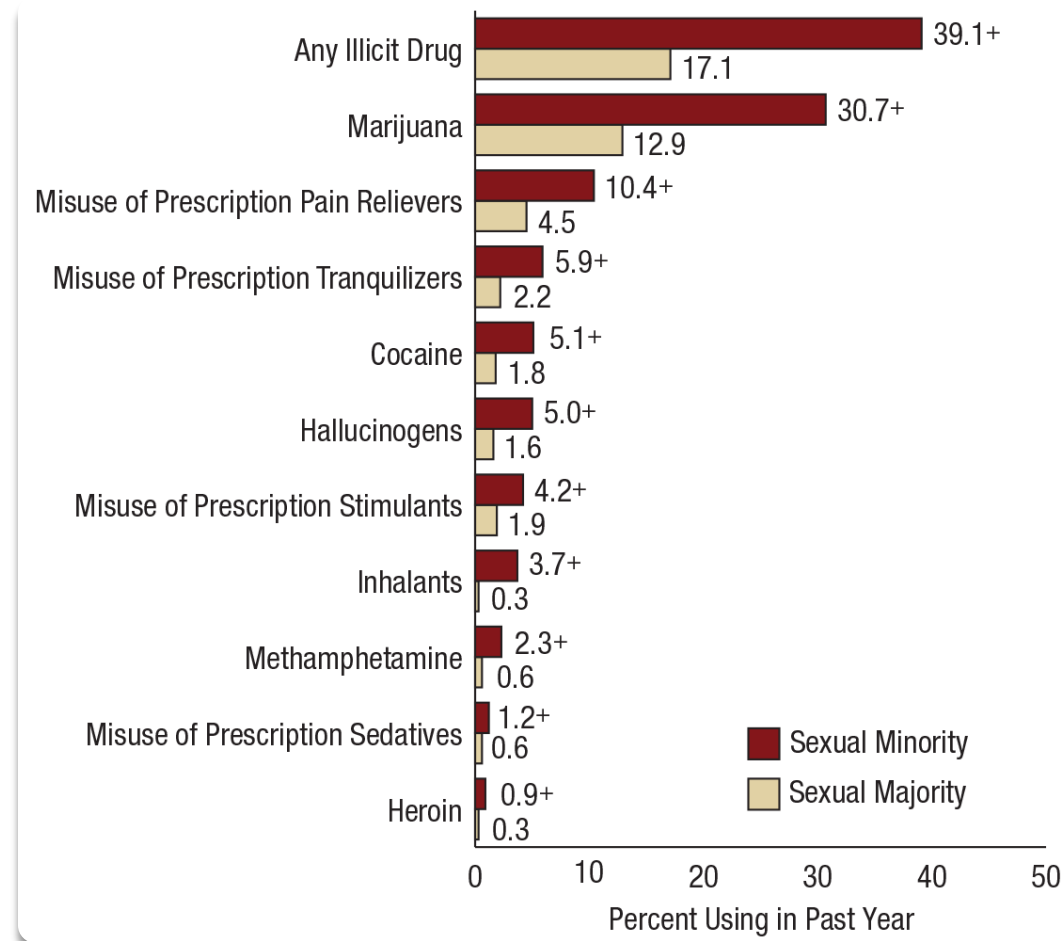
- Compared to heterosexual males, rates of depression among MSMs were 17% higher
- PTSD and substance use 2X higher
- Among MSM with HIV, rates were even higher
 - Sample of 500 GBSM living with HIV, 47% anxiety disorder, 22% depressive mood disorder, 20% alcohol use disorder and 25% had elevated substance use

Minority Stress Theory



- Adapted from O'Hanlan, et al (1997). A review of the medical consequences of homophobia with suggestions for resolution. *JGLMA*;1:25-39.)

Substance Use (National Survey on Drug Use and Health - 2015)



WSW

- 368 women screened for STIs at a community health center in Boston
- 27% were WSW (17% exclusively WSW and 10%WSW/M)
- 17% had a past hx of an STI
- 5% had a current hx STI
 - Warts, herpes, PID

WSW

- WSW were more likely than WSM to have hx of
 - Depression, anxiety, PTSD
 - Suicidal attempts and in-patient hospitalizations
- WSW (+STI) more likely than WSW (no STI)
 - Bipolar disorder
 - Suicidal attempts
 - Injection drug use
 - Inpatient hospitalizations

Part Three

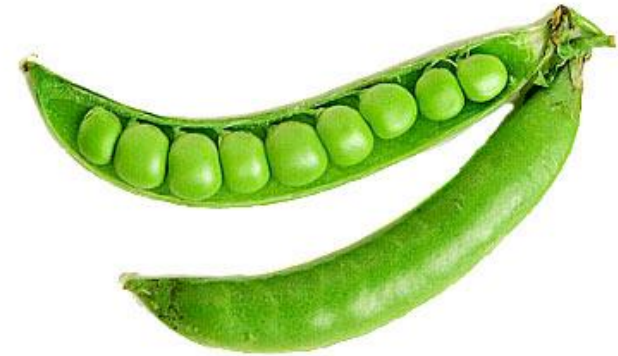
- Integrated screening for STIs and MH in clinical settings

CDC Sexual History 5 P's

- Partners
- Practices
- Prevention of Pregnancy
- Protection from STDs
- Past history of STDs

Expanded Sexual History – More P's for your Pod!

- Partners
- Practices
- Prevention of Pregnancy
- Protection from STDs
- Past history of STDs
- **Psychosocial issues***
- Prevention of HIV (PrEP)*
- Prevention of STIs (DoxyPEP)*



Psychosocial Issues

- Mental health issues (depression, anxiety etc.)
- Substance use
- History of survival sex,
- History of sexual victimization, unwanted sex, intimate partner violence
- History of incarceration

Psychosocial Issues

- *“Some of the patients that come to this office tell me they feel anxious or depressed at times”*
- *“Tell me how things are going in your life.”*
- *“Have you ever felt the need to be in counseling? Have you ever been in counseling? Have you ever taken any medications? Have you even been hospitalized? Have you ever had a suicidal attempt?”*
- *“Do you feel the need to be in counseling now? Would you like to talk to someone?”*



- May administer Phq9 or GAD 7

Mental Health Issues

- Trauma (historical)
 - ACES (Adverse childhood experiences)
 - Traumatic events happening before age of 18
 - Exposure to Domestic violence, Parental substance abuse, Parental incarceration, divorces, household instability, and personal history of abuse
 - Scale = 0-10
 - Dose related impact on behavior and maladaptive coping mechanisms

ACES

Excellent
☐ Very Good
☐ Good
☐ Fair
☐ Poor
☐ DK/NA/R

On a scale of 1 to 5 where 1 represents Excellent and 5 represents Poor, how would you rate your level of satisfaction with the program?

1 2 3 4 5
☐ ☐ ☐ ☐ ☐

On a scale of 1 to 5 where 1 represents Excellent and 5 represents Poor, how would you rate your level of satisfaction with the program?

1 2 3 4 5
☐ ☐ ☐ ☐ ☐

MH and Substance Use

- Substance use may affect a person's decision to have sex, who to have sex with, and may interfere with their motivation/ability to utilize protective measures
- Often used as “self-medication”
- Address MH issues, trauma
- May help reduce “hyper-arousal” and facilitate sleep

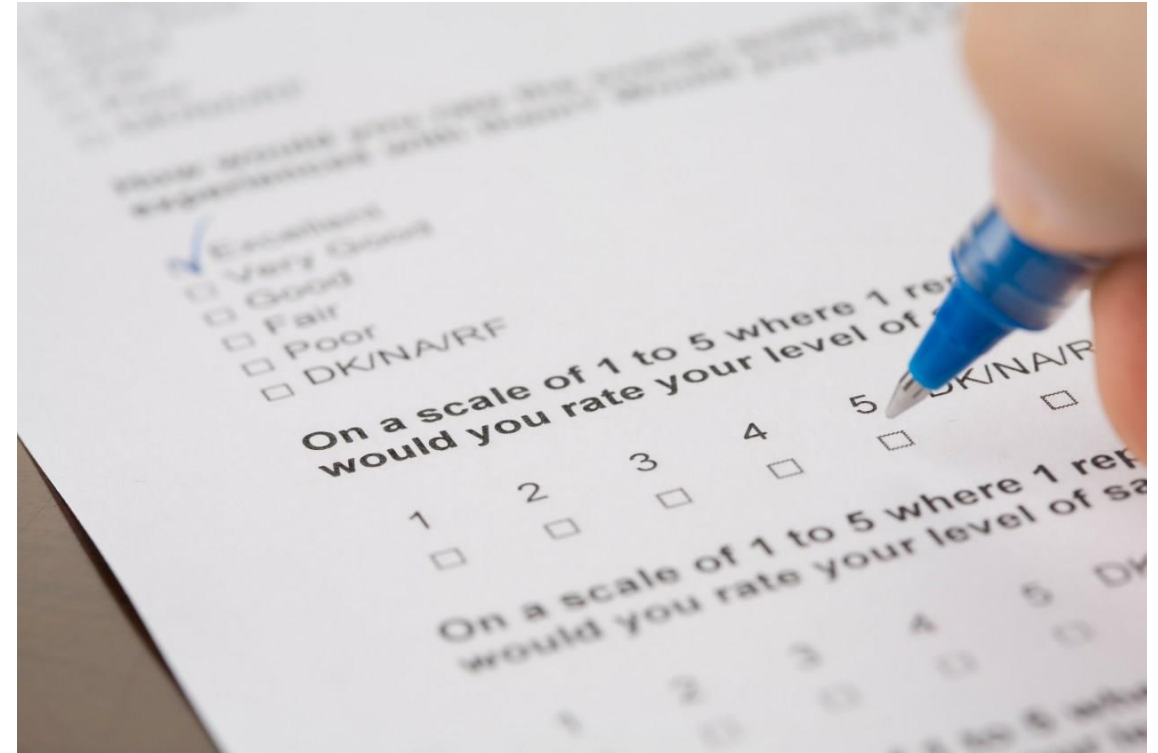
Substance Use

- *“Many of the patients I work with tell me they use alcohol or drugs for various reasons...”*
- *“How about you, yourself?”*
- *“If you use alcohol or drugs...talk to me about what you use, how much you use and under what circumstances?”*
- *“Have you ever sex under the influence of alcohol or drugs?”*
- *“Do you feel or has anyone ever suggested to you that you need to slow down or cut back?”*



Substance Use

- Common substance use and abuse screening measures are the Drug Abuse Screening Test, ([DAST-10](#)) and the Alcohol Use Disorders Identification Test-Concise ([AUDIT-C](#)).



Survival Sex

- Sex as currency...to obtain money, food, shelter, drugs etc.
- ***“Some of the patients I see in this clinic tell me that sometimes they have sex to get money, drugs, a hot meal, clothes or a place to stay. Tell me what you think about this, and if you have had any of those types of experiences...now or in the past.”***

Intimate Partner Violence

- IPV is common and may be an issue in ANY relationship
- *“Have you ever had any altercations with partners in the past?”*
- *“In general, when you and your current partner disagree or have an argument, how are things settled?”*
- *“Do you ever put your hands on your partner, or does your partner ever put hands on you?”*
- *“Do you feel safe in your current relationship?”*

IPV

- $\frac{1}{3}$ of sexual minority males and $\frac{1}{2}$ of sexual minority females report being victims of physical or psychological abuse in a romantic relationship

- Breiding et al 2013 *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Findings of Victimization by Sexual Orientation*. Atlanta, GA:

Hurt, Insult, Threaten and Scream [HiTS]

- How often does you partner...
 - 1=Never 2=Rarely 3=Sometimes 4= Often 5= Frequently
- Physically hurt you (1-5)?
- Insult or talk down to you (1-5)?
- Threaten you with harm (1-5)?
- Scream or curse at you (1-5)?
- Total Score:____
- Range 4-20....(10 or higher needs referral)

Incarceration

- Sexual risk-taking common among arrested and detained individuals
- Data from screening program in NYC jails indicated that incarcerated individuals had *more STIs* than all 10 NYC STD clinics COMBINED!
 - Pathela P et al. Sex Transm Dis 2009



Incarceration

- Following release, many individuals return to communities of origin and resume or increase risk-taking behaviors
- ***“Some of the clients that come to this clinic tell me that they have been incarcerated (locked-up) at some point in their lives”***
- ***“Tell me about any experiences you have had with being locked up”***
- ***“Were you ever tested upon entry or release from the facility? If so, what did they find?”***
- ***“Since coming home, talk to me about any types of sexual experience you have had”***

Survey Collection



Smoki

- 28 yo male hair stylist, coming in to get a note for work. Missed 2 days last week due to low grade temp, sore throat, body aches ,and chills. Feels better now.



Approach: CDC 5 Ps

- **Partners**

- Females (2 in past 3 months)
- Males (8 in last 3 months)
 - Meets them via apps

- **Practices**

- Oral, vaginal and anal sex (bottom)
- Last sex 1 week ago (male)

- **Prevention of Pregnancy**

- Believes female partners are “on something”

Approach: CDC 5 Ps

- **Protection from STDs**
 - Inconsistent with condoms
 - Was on PrEP in the past...but “kept forgetting”
- **Past history of STDs**
 - Had a negative STI and HIV screens 1 year ago at a PRIDE event

Expanded Sexual History

- Substance use
 - MJ daily, Occasional = mollies, cocaine, crystal meth
- Mental health issues
- PHQ9 = 16, GAD-7 = 17, ACES = 9
 - Evidence of severe anxiety, depression and trauma
 - Further history revealed prior involvement with survival sex, sexual victimization, and intimate partner violence
 - Denies hx of incarceration

Sample Script

- *“Thank you for coming in today. Happy to write you a note for work...but we should do a few tests to see if we can figure out what’s been going on with your health...In addition to doing basic screening tests for Covid, HIV and STIs, we should also spend a few minutes talking about how to prevent HIV and STIs. It sounds like you have some concerns about remembering to take PrEP. Well we have a long-acting injectable option now that we can discuss*
- *Also...looks like there has been a lot going on in your life and I appreciate how difficult things have been. Many of my patients find it helpful to talk with the social worker on our team to get some help. Would it be ok if I introduced you to her today?”*

Clinical Structure

- Ideally, should have MH support integrated into your clinical setting



Warm Handoffs

- Providers utilize the rapport and trusting relationship they have developed to help patients engage positively with behavioral counselors



Clinical Structure

- If not feasible to have MH services on site...you should have referral policies set up
- However, up to 50% of patients referred to outpatient mental health services will not make their first appointment



- Benefits of integration of behavioral health. Primary Care Collaborative. [://www.pcpcc.org/content/benefits-integration-behavioral-health](http://www.pcpcc.org/content/benefits-integration-behavioral-health)

Clinical Structure

- Or, you may want to consider continuing education to become more familiar with the basics of treating patients with common mental health disorders (anxiety, depression, ADD etc.)

Back to Smoki...

- COVID screening
- HIV/3-site STI, Hepatitis and Syphilis screening
- Education and Counseling
 - HPV vaccine
 - MPOX vaccine
 - PrEP
 - DoxyPEP
- Social work referral

BTW...

- Covid = neg
- Hep A and B = immune
- Hep C = neg
- Urine, oral, anal naats (+) for GC and CT
- RPR 1:64

BTW...

- HIV (+)

Treatment Plan

Returned to clinic the next day for:

- Ceftriaxone and Doxycycline
- LA Bicillin
- Initiate ARV
- Partner notification
- Mental health counseling and support

Conclusion

- STIs may cause psychosocial distress
- MH conditions may enhance risk factors for acquisition of STIs
- Patients with MH disorders should be routinely screened for STIs, particularly in areas of the country with high community burdens
- Patients with STIs should be screened for MH disorders and provided with counseling and treatment, directly or by referral

CONTACT INFORMATION

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