

Special Populations-Women

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Special Population

- Prior to 1970, minimal research included women
- Current:
 - Increased NIH/NIDA funding to study treatment for women
 - SAMHSA survey-
 - 2007: 27% of treatment programs included specific services for women
 - 2018: 51% of treatment programs included specific services for women

Epidemiology-Substance Use

- Women are approaching same prevalence of substance use as men each decade.
 - 1980: Men 5X > Women for alcohol, 3X > for other drugs
 - 2010: Similar prevalence outside of adolescents (female>male)
 - 2019: Women constitute 39% of adults reporting SUD
- Women's substance use is heavily influenced by her male partner.

Epidemiology-Mental Illness

- Mental illness is almost ALWAYS present with SUD diagnosis
- Women are:
 - Twice as likely to have affective disorder (depression, anxiety, bipolar disorder)
 - 10X increased prevalence of eating disorders
 - Increase over baseline when sexual trauma is experienced
 - More likely to have more than three MI diagnoses

Women's Health in 2022

- 500,000 pregnancies/year complicated by psychiatric illness (22%)
- 8 out of 10 pregnant women report no medical care for psychiatric illness
- Suicide is the leading indirect cause of death for pregnant women
- 4% of pregnant women meet criteria for SUD (not including tobacco use disorder)

Women's Health in 2022

- NAS affect 7 births out of 1,000 (not just opioids)
- Pregnant women are the most common victim of domestic violence
- Women with mental illness are more likely to use tobacco (50-65%)
- Methamphetamine poisoning are eclipsing opioid overdoses in NE Indiana

Women's Health in 2022

- Marijuana use reported in 15-28% of women in lower socioeconomic groups
- 35-60% of women continue to use marijuana during pregnancy
- Use of nicotine products in women of childbearing age increased for the first time in 2018- 14%

Women's Health in 2022

- Women <25 yo had highest rate of nicotine use during pregnancy
- 58% of pregnant women from Indiana report alcohol use during pregnancy
- 23% of pregnant women from Indiana report binge drinking during pregnancy

Medical Considerations with SU

- Women are:
 - Increased likelihood of developing medical complications from substance use
 - Increased likelihood of developing side effects from medical interventions

Alcohol and Women's Health

- Most literature available
- With less alcohol consumption, women suffer more-
 - Liver disease
 - Heart disease
 - Neurological disease
- “Telescoping”
 - Women develop disease faster than men as well

Alcohol and Women's Health

- “Telescoping”
 - Women develop disease faster than men as well with overall less consumption
- Lower activity of enzymes
- Lower BMI
- Lower total water/higher fat
- Higher BAC after same amount ingested

Alcohol and Women's Health

- Increase risk of:
 - Liver disease
 - High Blood Pressure
 - Memory loss
 - Breast cancer
 - Gastrointestinal disease
- Women have a 50-100% higher death rate from alcohol use disorder, including deaths from suicide, alcohol heart disease, stroke, and liver damage.

Alcohol and Women's Health

- Alcohol Use Disorder \neq Binge Drinking \neq Risky Drinking
- Risky Drinking (Women):
 - Binge Drinking: 4 or more servings of alcohol at one setting
 - Heavy Drinking: 8 or more servings of alcohol a week
 - ANY alcohol consumption while pregnant
- Alcohol Use Disorder: DSM 5 diagnosis
- Survey of 150 HCP: None were aware of gender differences

Alcohol and Women's Health

- 9% drink more than daily and weekly limits, probably meeting criteria for moderate-severe AUD
- 19% either exceed daily OR weekly limits
- 37% ALWAYS drink within low-risk limits AND
- **35% NEVER DRINK ALCOHOL!**

Alcohol and Women's Health

- Prenatal Alcohol Exposure
 - **NO AMOUNT OF ALCOHOL IS SAFE IN PREGNANCY**
 - Our responsibility to educate ALL women of childbearing age
- Fetal Alcohol Spectrum Disorder
 - Spectrum of physical and behavioral disorders
 - Most serious: Fetal Alcohol Syndrome
 - Most common non-hereditary cause of cognitive disability
 - Dose dependent

Other Drug Use and Women's Health

- Less literature
- Same “telescoped” pattern (time of first use-->SUD)

Other Drug Use and Women's Health

- Stimulants (prescription, cocaine, methamphetamine)
 - Higher risk of SUD-
 - Due to reinforcing effects
 - Influence of male partner
 - Severity of withdrawal symptoms
- Opioids
 - Women are more likely to misuse prescription OPI vs. men
 - Much greater susceptibility to overdose
 - More likely to be co-prescribed sedating medications (BZP)

Other Drug Use and Women's Health

- Tobacco
 - US: Men 16.7%/Women 13.7 % prevalence
 - Men-smoke for "reward"
 - Women-smoke for "relief"
 - Co-occurring mental illness
 - 37% prevalence of tobacco use
 - SMI-60-70%
 - OTP-90%

Interpersonal Violence

- DV- 21% of violent crimes (79% against women)
- 86% of sexual assault victims are women
- 1 in 6 women experiences a sexual assault or attempted sexual assault in their lifetime (42% episodes occurring before age 18)
- 19% of college aged females experienced sexual assault or attempted sexual assault since starting college
- Only 16% of sexual assaults are reported to law enforcement

Interpersonal Violence

- High incidence of:
 - SUD
 - Mental illness
 - Medical problems
 - Need for integrated care
- Safety Plan
- Common Mistakes

Psychiatric Disorders

- Still find “silo” of treatment
- Address SUD AND mental illness at same time
- Screen ALL patients who present for SUD for MI
- Screen ALL patients who present with MI for SUD (objectively!)
- Differential Diagnosis for all Mood Disorders-#1 is substance use

Psychiatric Disorders-Anxiety

- Most common DX (lifetime 35%/annually 22%)
- Early recovery-anxiety with developing coping skills without use of substances
- Untreated anxiety-->premature drop out from SU treatment
- Clinical interventions
- Medical interventions
 - BZP not indicated outside of extremely well-defined circumstances
 - “Antidepressants” should be called “anti-anxiety and depressants”

Psychiatric Disorders-PTSD

- Prevalence: 10% women vs 4.9 % men
- Events:
 - SA most frequent reported event
 - Development of PTSD: Women-20% Men 8%
- 79% of women with PTSD also have another diagnosis
- Women with SUD→65% meet criteria for PTSD as well
- 33% of women do not recover, regardless of treatment and time

Psychiatric Disorders-PTSD

- Women with history of childhood sexual abuse:
 - 4X higher risk of mental illness
 - 3X higher incidence of substance use
 - 11X greater risk of suicide attempt

Psychiatric Diagnosis-Depression

- Prevalence: women-10.8% vs men 5.1%
- (Bipolar I/II disorder-1.4%)
- Increased risk with SU
- 33% of women with depression meet criteria for SUD as well.
- Differential diagnosis for refractory depression: untreated substance use is #1, 2, and 3!

Psychiatric Diagnosis-Eating Disorders

- 50% of patients with ED also use alcohol/illegal drugs (5X general population) (27% AN, 23% BED, 37% BN)
- 35% of patients with SUD have eating disorders (1.1X general population) (12-18% AN, 25% BED, 30-50% BN)
- If substance use co-occurs with ED
 - Risk of suicide increased fourfold
- “Drunkorexia”-eating disorder behavior to offset calories from planned alcohol or to increase effects of alcohol.
- Specialized treatment required.

Psychiatric Disorders-Personality D/O

- Most common-borderline personality disorder
- Also, very overdiagnosed
- 57% of women with BPD meet criteria for SUD
- General population-1%
 - Community Mental Health Centers-10%
 - Inpatient psychiatric hospitals-20%
- CSA very common

Other psychiatric concerns

- PMDD-premenstrual dysphoric disorder
- Menopausal mood disorder
- Sexual dysfunction (primary and secondary)
- Vast body of information-encouraged to discuss with psychiatric provider

Special Populations-Immigrants

- Acculturation-reporting SU may be difficult
- Patriarchal-discussing family (and past abuse) may be difficult
- Fear of institutions (law, medical, social)
- Much work to be done

Special Populations-Lesbians

- Cultural expectation-alcohol use-social.
- 20% more likely to have depression, 30% more likely to have experienced sexual/physical abuse
- Specialized treatment?
 - Can be helpful to focus on unique stressors/trauma?
 - Can also perpetuate isolation and discrimination?
- LGBTQ+ enter recovery at a higher rate than general population.

Treatment

- Men outnumber women (3:1) in entering treatment
 - Barriers-childcare, stigma, fear of loss of custody of children
- Gender does not predict worse outcome in treatment
- Addressing unique needs improves outcomes

Treatment-Management

- “Steps of Change”
 - Women will focus on most pressing concerns first
 - Typically:
 - Domestic Violence
 - Housing
 - Risky Sexual Behaviors
 - Addiction
 - Mood

Treatment-Retention

- Level of Burden-->risk of early termination of treatment
- Women-only programs tend to address better:
 - Parenting
 - Housing
 - Employment
 - Skills

Treatment-Medical Coordination

- Substance Use
- Mental Illness
- Preventative health care
- Gynecological care
- Pediatrics
- Vision and dental

Treatment-Child Reunification

- Retention in treatment is associated with reunification
- Engagement in specialized treatment is associated with reunification (2X greater)
- The broader the range of services, the higher likelihood of reunification
- The longer the duration of treatment, the higher likelihood of reunification

Treatment-Culture

- Women prefer:
 - Less male dominated treatment
 - More supportive, less confrontational interventions
 - Trauma informed care
- Programs that rely on staff with:
 - Little advanced professional training (more lived experience)
 - Training is remote (more dogmatic)-difficult to change (language, stigma)
 - Increased premature cessation of treatment (and discharge)
- All female staff? Leadership?

Pregnancy

- Small percentage of treatment population
- Preconception
 - Long-acting reliable contraception
 - Assessment of medication choice with women of childbearing age
 - Assessment and treatment of amenorrhea
- Unintended Pregnancy
 - 49% of pregnancy in US
 - 87% of pregnancy with SUD

Pregnancy

- Prejudice and stigma--?reluctance to seek care.
- Previous loss of custody of children
- Societal/familial norms

Pregnancy

- 5X more likely to have co-occurring psychiatric illness
- 33-66% have history of childhood physical or sexual assault
- 30-59% meet criteria for PTSD
- 6% of all pregnant women experience IPV vs. 39% of pregnant women who use drugs

Pregnancy

- Use of alcohol, tobacco, and drugs during pregnancy is the leading preventable cause of mental, physical, and psychological impairments in children.
- 9.3% of pregnant women report alcohol use
- 15.4% of pregnant women report tobacco use
- **Majority of substance use in pregnancy is legal substances**
- 10.1% of pregnant women report cannabis use
- Between 1998-2019, there was a 188% increase in opioid dependent pregnant women presenting for delivery.

Research

- Stigmatization of mental illness and substance use
- Criminalization of substance use
- Multifactorial
- Publishing Bias
- Gold Standard (RCT) impossible in pregnancy

Screening

- ACOG, ASAM, AAFP all recommend use of validated screening tool for:
 - Substance Use (4 P's, CRAFFT, NIDA Quick Screen)
 - Mood Disorders (PHQ, GAD, Becks)
 - Risk for Domestic Violence (HITS, HARK)
- **SBIRT not shown helpful in pregnancy**

Screening

- Conversation vs. Checklist
- Motivational Interviewing
- Empathy
- Lead with:
 - HELP
 - PREVALENT
 - CONFIDENTIALITY

Screening

- *Hi, I'm _____, nice to meet you. If it's okay with you, I'd like to ask you a few questions that will help me give you better medical care. The questions relate to your experience with alcohol, cigarettes, and other drugs. Some of the substances we'll talk about are prescribed by a doctor (like pain medications). But I will only record those if you have taken them for reasons or in doses **other than prescribed**. I'll also ask you about illicit or illegal drug use—but only to better diagnose and treat you.*

Laboratory Testing

- Maternal: urine drug testing (never done without consent)
- Newborn: cord blood, meconium, urine
- Strong support for screening and testing ALL pregnant women.
- Indiana Law (2019)
 - Every obstetrical provider must use a validated risk assessment tool for all pregnant women. (Can add urine drug testing as needed)
 - Cannot report any positive results to DCS unless signs of abuse/neglect are present
- **A positive drug test does not diagnose a SUD and a negative drug test does not rule out a SUD**

Screening

- Most common way of avoiding detection of SU is avoiding care altogether
- Most women feel that prenatal care providers will report ongoing use to DCS
- Interventions that involve education on risks of SU vs information about consequences are superior
- Goal is overall wellness, not “being clean at delivery”

Substance Use in Pregnancy-Tobacco

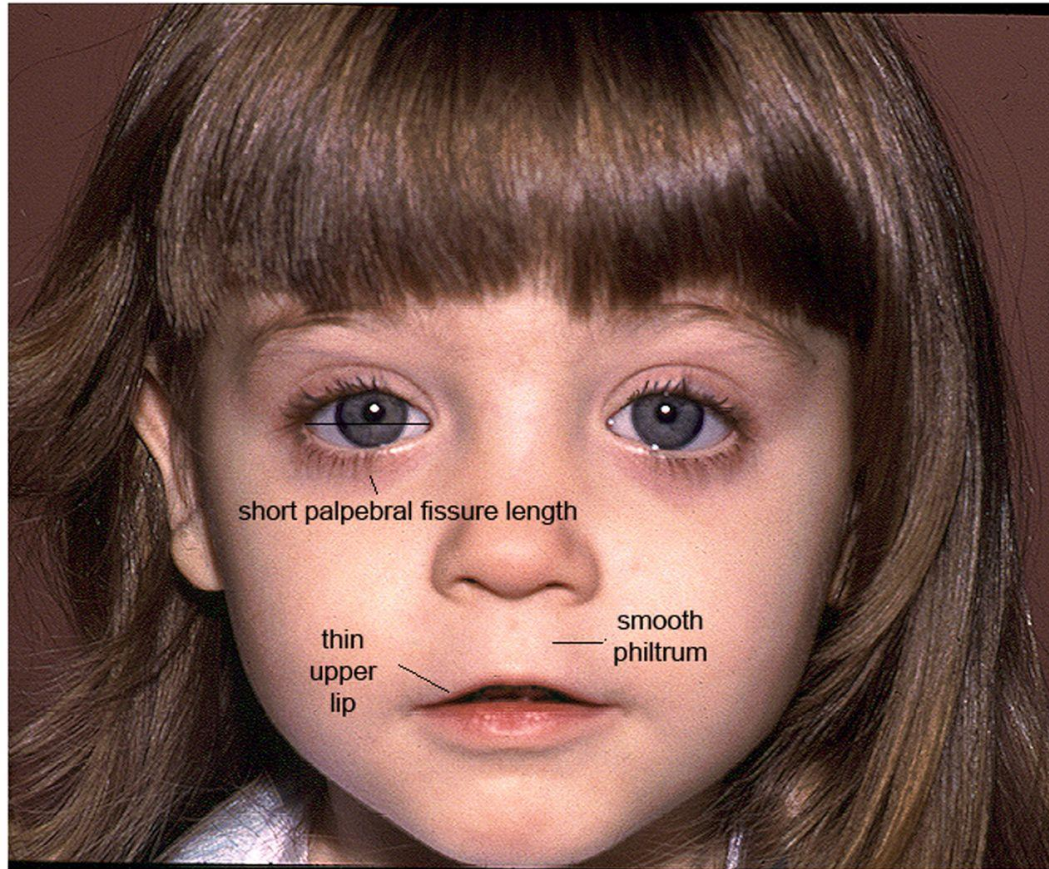
- 40% of women who smoke quit during pregnancy (60% do not)
- No evidence that NRT helps in pregnancy
- Little evidence for varenicline, bupropion
- Inverse relationship between birth weight and number of cigarettes smoked (anytime is good time to quit)
- 1/3 of SIDS deaths may be prevented with cessation of smoking during pregnancy
- NAS occurs with nicotine withdrawal

Substance Use in Pregnancy-Alcohol

- 60% of women who drink abstain during pregnancy
- Withdrawal from alcohol needs to be medically managed
- No alcohol is safe in pregnancy

Fetal Alcohol Syndrome

- Evidence of growth retardation (prenatal and/or postnatal) Height and/or weight \leq 10 th percentile
- Evidence of deficient brain growth and/or abnormal morphogenesis
 - Structural brain anomalies or head circumference \leq 10 th percentile
- Characteristic pattern of minor facial anomalies
 - Short palpebral fissures, thin vermilion border upper lip, smooth philtrum
- Incidence 0.5-2/1000 live births



Fetal Alcohol Spectrum Disorder

- Low body weight.
- Poor coordination.
- Hyperactive behavior.
- Difficulty with attention.
- Poor memory.
- Difficulty in school (especially with math)
- Learning disabilities.
- Speech and language delays.
- Incidence as high as 1% of live births.

ND-PAE

- Neurobehavioral Disorder with Prenatal Alcohol Exposure
- Disorders in:
 - Thinking, planning, retaining learning
 - Behavioral problems including emotional regulation
 - Trouble with day to day living tasks
- Alcohol Exposure
 - More than 2 drinks at any time (**BINGE DRINKING IS RISKIEST**) or
 - More than 13 drinks in a 30 day period
- Consideration for MANY patients with SUD

Fetal Alcohol Exposure

- IQ generally > 70 with FAS, so it is not classified as an intellectual disability.
- Learning problems and functional deficits quite common.
- Facial features and growth deficits may attenuate over time.
- People with FASD are at high risk of Substance Use Disorder.
- Children with FASD living in a stable and nurturing home for most of childhood strongly protected against Alcohol Use Disorder.

Substance Use in Pregnancy-Cannabis

- Most common “illegal” drug used in pregnancy
- Incidence of use is growing in states where recreational/medicinal cannabis is legalized
- Animal studies show impaired brain development
- Human studies show poor visual-motor coordination and decreased attention span
- No impact on fetal growth, premature labor, stillbirth or congenital defects

Substance Use in Pregnancy-Opioids

Abstinence based therapy is not recommended during pregnancy for anyone who is actively using opioids (or in treatment for opioid use disorder with medications)

Substance Use in Pregnancy-Opioids

- Goal in treatment is to:
 - Reduce exposure to illegal drug use (associated with secondary risks)
 - Engage in prenatal care
 - Avoid opioid withdrawal symptoms
 - Premature labor
 - Fetal demise
 - The dose of any medication does not correlate with the risk of newborn withdrawal symptoms.

Substance Use in Pregnancy-Opioids

- Medications for OUD are indicated
 - Methadone
 - Buprenorphine/Naloxone
- Methadone was the “gold standard”
 - Reduced cravings
 - Decreased risky behaviors
 - Improved engagement in prenatal care
 - Improved nutrition
 - Improved engagement in SU treatment (vs. BUP/N)

Substance Use in Pregnancy-Opioids

- Buprenorphine-Naloxone
 - Study in 2010 studied MTD vs BUP-N
 - Reduced length of stay in hospital for newborn with BUP-N
 - Decreased need for medications to treat NOWS with BUP-N
 - Improved retention in treatment with MTD
 - Conclusion:
 - Either medication is indicated
 - Select based on specific patient centered criteria
- Best to start BUP-N before 24 weeks gestation

Suboxone vs Subutex

- In past (before 2012)
 - Felt naloxone could be dangerous to fetus in pregnancy
- With marked increased use (since 2016)
 - Minimal absorption of naloxone to maternal circulation
 - No evidence of naloxone in fetal or newborn circulation
 - Risk of diversion and misuse significant (not always by mother but by others which can prevent access to medication)
 - No indication for use of mono-product in pregnancy

Substance Use in Pregnancy-Opioids

- Abstinence based treatment in pregnancy
 - “I’ll just stop”
 - Associated with 29-90% return to use
 - Reduction in engagement with prenatal care
 - Episodes of intoxication and withdrawal
 - Risk of overdose with reduced tolerance
 - Ultimately does not reduce risk of NOWS due to return to use incidence

Substance Use in Pregnancy-Opioids

- Neonatal Opioid Withdrawal Syndrome (NOWS)
 - Known potential outcome of appropriate treatment for OUD in pregnancy
 - Prevention?
 - No known long-term consequences to infant
- “Mom is the Medicine”
 - Skin to skin
 - Breastfeeding (only contraindication is active use)
 - Quiet surroundings (not NICU)

BABIES ARE NOT 'BORN ADDICTED'



Substance Use in Pregnancy-Opioids

- Tobacco Use and NOWS
 - More tobacco use increases:
 - Amount of medication required to treat NOWS
 - Length of hospitalization for newborn
 - Number of days medication is needed for NOWS
 - Another reason to work on tobacco cessation in pregnancy

Substance Use in Pregnancy-Opioids

- DCS Safety Planning
 - Helpful for any psychiatric diagnosis, not just OUD
 - Typically, only done for OUD
- Address issues that may delay unification of newborn and family prior to delivery
- No “surprises”

Substance Use in Pregnancy-Stimulants

- No evidence that appropriately prescribed stimulants cause harm
- Stimulants have highest risk of poor pregnancy outcomes
 - Powerful vasoconstriction → fetal loss, low birth weight, premature delivery
 - “Crack Babies”-stigmatizing characterization in 1980’s, no evidence of evolution.
- Maternal complications: hypertension, stroke, postpartum hemorrhage

MISINFORMATION

- ASAM has updated consensus on treatment of opioid use disorders (2020) in collaboration with AAPA, ACOG, APA
- 16 revisions to previous policy statements
 - Some major and
 - Some minor.

ASAM CONSENSUS PAPER-LOUD

- Pregnant women who are physically dependent on opioids should receive treatment using methadone or buprenorphine rather than withdrawal management or psychosocial treatment alone.
- When trying to prevent NOWS (expensive) discovered the alternatives are worse.
- Leading cause of postpartum death-overdose associated with return to use of opioids

ASAM CONSENSUS PAPER-**OUD**

- Treatment with medication should start ASAP once OUD is identified in pregnancy.
- Delays for assessments and clinical interventions can result in loss of engagement.
- A woman's decision to decline psychosocial treatment or the absence of available psychosocial treatment should not preclude or delay pharmacological treatment, with appropriate medication management, during pregnancy.

ASAM CONSENSUS PAPER-**OUD**

- The combination buprenorphine/naloxone product is frequently used in pregnancy and is considered safe and effective. Naloxone is minimally absorbed when these medications are taken as prescribed.

ASAM CONSENSUS PAPER-LOUD

- Discontinuation of methadone or buprenorphine before surgery is not required. Higher-potency intravenous full agonist opioids may be used perioperatively for analgesia in addition to the patient's regular (pre-surgery) dose of methadone or buprenorphine
- Previously (and still today)
 - Patients told to stop BUP-N or MTD prior to surgery or labor.
 - Results in opioid withdrawal
 - Can continue maintenance medication AND short acting opioids for pain.

Medication Management-Pregnancy

- 2016: Pregnancy and Lactation Labeling Rule (PLLR)
 - No more A, B, C, D, X
 - Separates Pregnancy, Lactating and Women of Childbearing Age
 - Gives the data...
 - Medications approved from 2015-present: have PLLR
 - Medications approved from 2001-2015: PLLR as of 2020
 - Medications approved prior to 2001-recommended but not required

Pearls for Medications PLLR

- Paroxetine (Paxil)-associated with cardiac deformities (do not use in women of childbearing age)
- Lithium-associated with cardiac deformities (do not use in women of childbearing age)
- Valporic Acid (Depakote)-associated with neural tube defects (do not use in women of childbearing age)
- Benzodiazepines (Xanax, Valium)-associated with cleft lip and palate, neonatal withdrawal

Psychotropics in Pregnancy

- Balance risk of relapse of mental illness with risks to fetus.
- Avoid polypharmacy if possible
- Older medications are usually better

Postpartum Care

- Identify Stressors
 - Fussy newborn
 - Poor access to support with other children
 - Postpartum depression
 - Financial stressors
- Emphasis on planning and support

Postpartum Care-postpartum depression

- Incidence with SUD: 20-46% (10-15% in general population)
- Experiencing a depressed mood most of the time.
- Frequent feelings of worthlessness or guilt.
- Loss of interest in once-loved activities.
- Experiencing significant weight loss or gain without trying to lose or add weight.
- Cognitive issues, such as low concentration, slowed speech, memory issues, and confused thought process — any or all can make one more likely to deviate from normal functioning.
- Experiencing sleeping difficulties (insomnia or excessive sleep).
- Feeling fatigued almost every day.
- Having recurrent thoughts about self-harm, dying, death, or suicide.(7th cause of maternal death)
- Moving slowly almost every day or being restless or highly irritable.

Postpartum Care-postpartum depression

- Edinburgh Postnatal Depression Scale
- Treatment:
 - Classically-
 - SSRI
 - Talk therapy
 - 2018: Brexanolone (Zulresso) approved for moderate to severe PPD
 - 96-hour infusion done in hospital
 - Oral form being developed

Clever Conclusion Slide

