Cognitive Restructuring For Addiction

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Addiction
A Brain Disease...
1. Reorganizes Information Processing In The Brain
2. Based Upon ...• Core Addictive Beliefs
• Automatic & Unconscious Addictive Thinking
• That Activates Deprivation, Craving, Drug Seeking Behavior, & Substance Use

Cognitive
Automatic Information Processing In the Brain

Core Addictive Beliefs
1. The Only Way To Have “The Good Life” Is To Use My Drug Of Choice.
2. The Best Way To Deal With Pain, Problems, & Survival Threats Is To Use My Drug Of Choice.

Restructuring
Changing The Automatic Habits Used To Process Information In The Brain

Cognitive Restructuring For Addiction (CRFA)
1. A Wide Variety Of Approaches (Medical, Psychological, and Social)
2. That Provides An Intellectual Framework For ...A. Understanding Addictive Brain Processes, Beliefs, & Automatic Thinking Patterns
B. An Alternative Set of Sober Brain Processes, Beliefs, & Thinking Patterns
C. A System For Conscious Self-Monitoring
D. A Way To Challenge And Replace Automatic Addictive Thinking With Sober Thinking
E. A Way To Develop A Sober Belief System To Support and habituate the Automatic Sober Thinking Process
Self Regulation Training
1. A New Understanding
2. Self Monitoring Tools
3. Conscious Awareness
4. Impulse Control
5. Self Motivation
6. New Action
7. Better Consequence
8. Habituation
9. Brain Circuit Restructuring
10. Reinforcement & Accountability Tools

Cognitive Restructuring For Addiction (CRFA)

(A Complex Definition)
Systematic Psycho-Biological Approaches
That Create Conscious Awareness Of
And The Ability To Self-Regulate
Information Processing Patterns
That Cause Craving, Drug Seeking Behavior, & Drug Use

Addictive Brain Response
1. Increases Pleasure Chemicals
2. Decreases Warning Chemicals

Addictive Thinking
1. Euphoric Recall
2. Awfulizing Abstinence
3. Magical Thinking

Addictive Feelings
1. Deprivation
2. Craving

Addictive Urges (Craving)
1. Fellow Addicts
2. Codependents

Addictive Actions (Drug Seeking Behavior)

Addictive Relationships
1. Fellow Addicts
2. Codependents

Addictive Perceptions
1. Lock On: Good Times
2. Block Out: Bad Times

Addictive Beliefs
AOD Use Is...
1. Safe
2. Necessary

Addictive Images
1. Lock On: Good Times
2. Block Out: Bad Times

Addictive Thinking

Addictive Feelings

Addictive Urges (Craving)

Addictive Actions (Drug Seeking Behavior)

Addictive Relationships
Cognitive Dissonance
A Dynamic Conflict Between …
1. Addictive Self
   • Complex Pattern Of Neuro-Circuits
     Created By Habitual Patterns Of
     Euphoria / Dysphoria Caused By Addiction
1. Sober Self
   • Complex Pattern Of Neuro-Circuits
     Created By The Habitual Self-Observation
     Resulting From Detachment & Conscious
     Connection With The Higher Self (Capacity For
     Self Observation & Self-Conscious Change)

Thought Management
• Identify
• Personalize
• Challenge
Addictive Thought = AOD Craving
Irrational Thought = Unnecessary
Pain & Problems

Identifying Addictive Thoughts
4. It’s OK To Use Frequently & Heavily
   • It’s Not OK To Use In Moderation Or
     To Stop Using
5. AOD’s Make My Life Worth Living
   • Without Them Life Isn’t Worth Living
6. I Must Use To Have a Good Life
   • I Can’t Have A Good Life Without Using

Identifying Addictive Thoughts
7. I Need Alcohol & Other Drugs To
   Survive
   • I Can’t Survive Without Them
8. People Who Support My Use
   Are My Friends
   • People Who Oppose My Use
     Are My Enemies

Identifying Addictive Thoughts
1. Alcohol And Other Drugs Are Safe
   • I’ll Never Get Addicted
2. Using AOD’s Is Good For Me
   • Not Using Is Bad For Me
3. AOD-Centered Lifestyles Are Good
   • Lifestyles Centered On
     Other Things Are Bad

Personalizing Addictive Thoughts
1. Select 3 Addictive Thought You
   Want To Learn How To Manage
2. Write Personal Title
   • A Word Or Short Phrase
3. Write Personal Descriptions
   • I know I’m using addictive thinking
     when I start saying to myself …
**Personalizing Addictive Thoughts**

4. Identify Similarities & Differences
   - In What Ways Are The 3 Addictive Thoughts Similar?
   - In What Ways Are They Different?

5. Identifying The Addictive Argument
   - Can You See A Sequence Of Thoughts That Convince You To Use?

**Challenging Addictive Thoughts**

1. I know I’m using addictive thinking when I start saying to myself …
2. I can challenge this addictive thought (convince myself it’s not true) by saying …
3. Format of Challenge …
   - No! This Is Not True!
   - Here’s The Evidence! *(Strong Emotion)*
   - Here’s Where This Will Take Me!
   - Stop! I Won’t Think Or Act This Way!
   - I Will Use My Thought & Action Plan

**Inner Dialogue Between Addictive & Sober Self**

6. Write The Three Sober Thoughts On 3 X 5 Cards Using This Format:
   A. Title of the Sober Thought:
   B. Self-Talk Statement *(Sober Challenge)*
      - The Exact Words For Fighting Back Against Addictive Thoughts
   C. Confidence Level (0 – 10)
      - How sure are you that this sober thought can turn off the addictive thought?

**Skills Sets Needed**

1. **Relaxation Response Training**
   - Stress Self-Monitoring *(Stress Thermometer)*
   - Relaxation Methods

2. **Detachment** *(Identifying With Higher Self)*
   - Establishing Detached Awareness
   - Detachment Of Identity From Lower Functions
   - Attachment Of Identity With Higher Self

3. **Addiction-Focused Problem Solving**
   - Link Life Problems To AOD Use
   - Provide Sober Problem Solving Process

4. **Manage Addictive Thinking**
   - Thoughts That Cause Craving

5. **Manage Addictive Feelings**
   - Feelings Of Deprivation & Craving

6. **Manage Addictive Behaviors**
   - Habitual Drug Seeking Behavior

7. **Integrate Personal Reactions**
   - Automatically Managing Clusters Of Related Addictive Thoughts, Feelings, & Behaviors
## Skills Sets Needed

### 8. Relationship Restructuring
- Developing Relationships That Support Sobriety & Responsibility

### Cognitive Restructuring Overview

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Chronic Pain in Women
Ilene R. Roback, MD
Bay Pines VA Health Care System

Case Study
- The patient is a 30 year female who comes in for treatment of fibromyalgia.
- She was a passenger in a car involved in an MVA about 5 years ago. Her pain symptoms started soon after the accident and have worsened steadily since then.
- She was not seriously injured but did hit her head and felt stunned but did not lose consciousness. One individual in the accident was killed and another seriously injured.

Case Study
- She has been seen by her primary care provider for her fibromyalgia symptoms but now comes in for consultation because she is interested in getting pregnant.
- She has been unable to work because of ongoing problems with headaches and generalized chronic pain since the accident. She describes her pain as something she feels throughout her body and is also associated with severe fatigue. She frequently has difficulty sleeping and has periods of time when she develops nightmares when she does sleep.

Case Study
- Her primary care provider has been treating her chronic pain with Oxycodone which she finds helps her sleep at night but has had decreasing effectiveness for her pain and she is concerned that it is worsening her daytime fatigue.
- She also understands that there are some risks to the baby if she remains on her Oxycodone after she gets pregnant. As she is now in her thirties she is interested in getting pregnant as soon as possible.

Case Study
- She also finds that she needs to drink a number of energy drinks per day to wake up and keep her headaches away. In addition, she is having difficulty going out in public, especially if it involves a trip in an automobile. She has a family history of alcoholism in her parents and avoided all alcohol because of this until after her accident.
- Currently she is also drinking 4 glasses of wine per day. She states that she was never informed of the potential drug interaction between Oxycodone and alcohol by her current provider.
Case Study

- She smokes marijuana occasionally to help with pain and anxiety symptoms.
- Physical exam is remarkable for multiple areas of tenderness on her back, both elbows, both knees and anterior chest wall.
- Laboratory evaluation is remarkable for significant Vitamin D Deficiency.

Case Study

- This risks of getting pregnant while on Alcohol, marijuana, opiates and high dose caffeine were discussed with her in detail and she agrees to use birth control until she can safely stop using these medications and drugs.
- At the time of her visit the opiate agreement was reviewed with her and her Oxycodone was tapered and discontinued. The risk of overdose when mixed with alcohol was emphasized and she agreed to stop alcohol entirely. She was also advised to stop using Marijuana. She has stopped both in the past for short periods of time without withdrawal symptoms.

Case Study

- She was able to quit drinking but unable to stop her marijuana use and in fact found that she increased her marijuana use once her opiate dose was lowered and she stopped drinking.
- She was referred to a dual diagnosis program to get treatment for PTSD, depression and substance use disorder. This also included family treatment that involved her husband.
- A multidisciplinary approach to her pain included the use of an nsaid, an anticonvulsant and a physical therapy program. Baclofen was used to help with symptoms of Opiate withdrawal and muscle spasm.

Case Study

- A dual acting antidepressant was used with good response.
- Prazosin was used to help with nightmares.
- After a year of ongoing treatment she was feeling significantly better with less pain. She remained off of all alcohol, opiates and marijuana. Because of her desire to get pregnant adjuvant pharmacologic therapy for pain was slowly tapered and discontinued. She continued the exercises that she learned in physical therapy as well as a structured aerobic exercise program.
- She will meet with her mental health provider regularly and if necessary an antidepressant that is considered safe to use while pregnant will be used.

PTSD, DSM4 criteria

- **Traumatic event (perceived/actual threat to life)**
  - 3 of the following sx's for ≥ 1 month
    - Re-experiences the event: intrusive recollections, nightmares, flashbacks
    - Avoid reminders of the event and has generalized numbness of feeling
    - Increased arousal: sleep, irritability, concentrating, vigilance, startle
    - Significant impairment in social, occupational, other areas of functioning
Comorbidity - Women with PTSD

- Depression
- Anxiety Disorders
- Alcohol Use Disorders


SUDS and PTSD

- Multiple Similar Connecting Pathways
- SUDS increases risk of trauma
- Withdrawal increases anxiety and arousal states increasing risk of PTSD symptoms
- Increase risk of SUDS in patients with PTSD in attempt to self medicate for symptom alleviation
- SUDS worsen PTSD symptoms and delay treatment


Symptom Overlap - Arousal

- Sleep disturbance
- Irritability
- Difficulty Concentrating

Symptom Overlap - Avoidance

- Lack of interest
- Social Withdrawal
- Feeling detached from others

SUD/PTSD Epidemiology

- SUD in civilian population without PTSD - lifetime prevalence 8%-24%
- SUD in civilian population with PTSD - 21% to 43%

Incidence of PTSD in Substance Abuse Treatment

- Women 33-59%
- Men 12-34%
- Related to traumas such as child abuse, rape, criminal assault, serious accidents, natural disasters, and combat.
- PTSD memories may worsen as recovery begins
- Studies show that simultaneous treatment results in better outcomes

**PTSD and Medical Conditions in Women**

- LS Spine disorders
- Headache
- Lower extremity joint disorders
- Skin disorders
- Tendonitis/Myalgia
- Fibromyalgia
- Dental Disorders
- Allergies
- Vision Defects
- Acute Respiratory Tract Infections
- Overweight/Obesity

**PTSD Treatment**

In primary care:
- Do not rush to assign diagnosis
- Educate the patient
  - this is a physical condition with clear physiological origin, and that early treatment is effective and lasting
- Form a treatment alliance
- Understand barriers
  - patients with PTSD by nature are avoidant; creating a trustworthy relationship is the first step to the patient engaging in treatment
- Correct misperceptions
  - often patients do not wish to be labeled, and feel that by seeking treatment, they are admitting to weakness

**PTSD in Women**

- As many as one in three women will experience some form of abuse from a family member or intimate partner during her lifetime.
- Intimate partner violence leads to serious physical health problems and mental health consequences.


**PTSD in Women-Intimate Partner Violence**

- gynecologic problems, including sexually transmitted diseases, urinary tract and vaginal infections, and painful sexual intercourse
- central nervous system problems, such as back pain, headaches, fainting, and seizures;
- chronic stress-related health problems, including hypertension, loss of appetite, abdominal pain, and increased susceptibility to viral and bacterial infections

**Trauma related PTSD in Women**

- A higher lifetime prevalence of chronic pain and cardiovascular, respiratory, gastrointestinal, musculoskeletal, and infectious diseases
- The more severe the PTSD symptoms, the greater the physical health problems experienced by trauma survivors in general

**PTSD Treatment in Women with Substance Use Disorders**

- Reducing severity of posttraumatic stress disorder (PTSD) symptoms is more likely to improve substance use outcomes, a finding that suggests that requiring patients with these comorbid disorders to be abstinent from drugs or alcohol before treating PTSD may be the wrong approach.
### Traumatic Brain Injury
- Loss of consciousness
- Altered mental state
- Loss of memory for events immediately preceding or after the injury
- Symptoms of headaches, sleep impairment, heightened sensitivity to light and noise, cognitive alterations, behavioral changes, chronic pain

### PTSD/TBI Symptom Overlap
- Irritability
- Fatigue
- Sleep Problems
- Cognitive Deficits
- Chronic Pain

### TBI
- The incidence is 500 per 100,000 people
- The peak incidence is between the ages of 15 and 24 and older than the age of 64 years
- In the civilian population, alcohol is involved in more than half the cases of TBI
- Motor vehicle accidents (MVAs), particularly motorcycle accidents, account for the most frequent civilian cause of TBI

### Post TBI Syndromes
- post-traumatic stress disorder (PTSD) 27%
- depression 15-33%
- Aggression (agitation, disinhibition, personality changes) 20-49%
- Increased risk of chronic pain
- Increased Risk of Substance Use Disorders

### Fibromyalgia
- 2% of the general population meet the criteria for the diagnosis of fibromyalgia
  - 3.4% of women and 0.5% of men.
- Genetic predisposition manifests when the person reaches a critical age or when he/she sustains an external insult, such as trauma or illness.
- Increasing evidence indicates that fibromyalgia may represent a dysregulation of dopaminergic neurotransmission

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Fibromyalgia Diagnostic Criteria

- The diagnostic criteria include 2 basic requirements.
  - The first is the presence of pain in all 4 quadrants of the body, as well as in the axial skeleton on a more or less continuous basis for at least 3 months. The pain is described as widespread or global.
  - The second criterion is the presence of at least 11 of 18 anatomically specific tender points.

Fibromyalgia Trigger Points

- Low Cervical Region
- Second Rib
- Occiput
- Trapezius Muscle
- Supraspinatus Muscle
- Lateral Epicondyle
- Gluteal Region
- Greater Trochanter
- Knee

Sleep Disorder

- Patients generally do not tell the physician that they have a sleeping disorder.
- History reveals unrefreshing sleep in about 65% of patients and morning fatigue in about 80%.
- Patients awaken as tired as they were before sleeping. Most patients awaken frequently throughout the night, and some have difficulty falling asleep.
- They finally fall asleep in the early morning hours, describing this as their best sleep.

Fibromyalgia Treatment Options

- Acetaminophen
- Tramadol (with caution)
- NSAIDS
- Antidepressants-Dual Acting
- TCAS
- Anticonvulsants
- Physical Therapy
- Education

Hyperalgesia in Fibromyalgia

- FMS patients show increased sensitivity to mechanical, thermal, and electrical stimuli.
- Abnormal central pain mechanisms may be instrumental for the augmented pain.
- Acute or chronic triggers, like trauma or infections can result in the chronic widespread pain of FMS.

Trauma and Fibromyalgia

- Many patients with FMS report pain precipitating events, particularly physical or emotional traumas, infections, or surgeries.
- Compared with adults with lower-extremity fractures or ankle injury, neck trauma carried a more than ten-fold increased risk of developing FMS within 1 year of their injury.
Chronic Musculoskeletal Pain

Stepped care multidisciplinary approach:

- Meds: NSAIDs, TCA or Neurontin for neuropathic pain, analgesic topicals
- Early referral for health psychology services, physical therapy
- Understand that co-morbid mental health conditions (anxiety, sleep disturbances, and PTSD/depression) will lower pain threshold and augment pain experiences; effective treatment strategies must address both

Chronic Pain Incidence

- Women have a higher prevalence than men of several clinical pain conditions and of inflammation-mediated disorders
- Microglia cells in the central nervous system have sex hormone receptors
- Sex differences in sensitivity to experimental pain and in the response to analgesics

Women and Chronic Pain

- Estrogen, progesterone, and other gonadal hormones have a complex role in inflammatory processes and the pain response
- Sex differences in the opioid, dopaminergic, serotoninergic, and other pain-related systems have been documented
- Differences are most pronounced during the peak reproductive years.

Middle Aged Women and Pain

- Young maternal age at first birth (fibromyalgia)
- High maternal age at last birth; having ≥2 children (pelvic joint syndrome)
- Higher spacing time between childbirths (pelvic joint syndrome)
- Metrorrhagia (rheumatoid arthritis)
- Sterilization (undefined arthritis, pelvic joint syndrome, and fibromyalgia)
- No associations were found for nulliparity, mean age at menarche, and menstrual cycling pattern

Hormonal and Reproductive Factors Associated with Low Back Pain

- Women 20-59 years
- The prevalence of chronic LBP was 8.9%, chronic UEP, 14.6%, 12.6% had chronic LBP as well as chronic UEP
- Incidence of women without chronic LBP or chronic UEP was 63.9%
- Hormonal and reproductive factors like an irregular or prolonged menstrual cycle and hysterectomy are associated both with chronic LBP and chronic UEP
- Factors related to increased estrogen levels like (past) pregnancy, young maternal age at first birth, duration of oral contraceptive use, and use of estrogens during menopause may specifically increase the risk of LBP
Chronic Pelvic Pain

- CPP incidence is 3.8% among women aged 15-73 years, ranging from 14% to 24% among women of reproductive age.
- About 60% of women with the disease never receive a specific diagnosis and 20% never undergo any investigation to elucidate the cause of the pain.
- Thirty-nine per cent of the women seen at primary care units complain of pelvic pain, which accounts for 40-50% of gynecological laparoscopies, 10% of gynecological visits and approximately 12% of hysterectomies.
- Additionally, CPP involves direct and indirect costs exceeding 2 billion dollars a year in the USA.

- There has been an increasing awareness of the need of multidisciplinary care involving physicians, psychologists and physiotherapists, among others.
- There is evidence that in most women with chronic pelvic disease the musculoskeletal system is compromised in different manners, at times of a secondary type such as postural changes or pelvic muscle contractures, and at times as the primary etiology.

Opiates in Chronic Pain, The 800 Pound Gorilla in the Room

Musculoskeletal Pain: Opiates

- Reserve opioids for refractory cases in appropriate patients
- May complicate MH treatment
- Be aware of SUDs risk
- If a patient comes from an outside provider already on opioids:
  - Continuation of prescription requires careful reassessment as to appropriateness of treatment, in light of high co-morbid MH and substance abuse risks in patients with chronic pain
  - The initial visit is an excellent opportunity to shift away from short acting opioids to long acting opioids, non-pharmacologic pain management strategies and non-opiate adjunctive therapy

Risk Factors for Opioid Misuse Among Pain Patients Differ by Sex

- 662 patients with chronic noncancer pain who take opioid medications were recruited from medical centers in 5 states and surveyed with pain assessment questionnaires
- Women with chronic pain are more likely to misuse opioids because of emotional issues and psychological distress
- Men are more likely to report social and behavioral problems, such as associating with friends who use drugs or alcohol, having a bad temper, or having legal difficulties
- Prescription opioid misuse present in 31% of males and 36.7% of females

If significant depression coexists enlist the help of mental health providers

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**Opioid Misuse in Women**

- Women may benefit most from clinical interventions such as antidepressant and individual and group cognitive or behavioral therapy that addresses the psychological risk factors for misuse.
- Education about avoiding the use of opioids as a way of dealing with anxiety or sleep disturbances due to stress may also be helpful.
- Clinicians at the pain management center of Brigham and Women’s Hospital have found through urine screens that up to 42% of pain patients misuse their medications.

**Chronic Pain and Sleep**

- Approximately 65% of patients with chronic pain report some type of sleep problem, with the most common issues including:
  - Delayed onset of sleep.
  - Frequent awakenings during the night.
  - Decreased duration of sleep.
  - Daytime fatigue.
  - Sleep that is nonrestorative.

**Sleep and Chronic Pain**

- Altered sleep architecture (with more time spent in stage 1 sleep, i.e., drowsiness).
- More frequent night-time awakenings and body movements reported.
- Significant increases in stage 1 sleep and significant decreases in stage 2 sleep (intermediate stage of sleep) in patients with osteoarthritis compared with healthy controls.

**Treatment Options - Sleep**

- Improved sleep when long acting opiates used instead of short acting opiates.
- Patients with rheumatoid arthritis revealed that 78% used benzodiazepines for pain-related insomnia.
- 44% of patients with chronic pain use benzodiazepines solely for the treatment of sleep disturbance.
- 42% used them not only for sleep, but also for the treatment of anxiety, muscle relaxation, and pain relief (King & Strain, 1990).
- Patients with arthritis who received sedative-hypnotics at night reported significantly higher levels of pain and greater disability than those who did not receive sedation.

**Sleep Disorders in Women**

- Female gender is a risk factor for developing insomnia and RLS.
- Women seem to be more susceptible to the direct health consequences of shiftwork.
- Growing evidence suggests that females are as afflicted by OSAS as males.
Sleep
- Addressing sleep concerns is often a good first step towards more comprehensive mental health treatment
- Decent data to support Prazosin as a first line in treating nightmares. Starting dose 1 mg hs and can be slowly titrated upward by 1 mg per week up to 10 mg.
- Also
  - Trazodone
  - TCAS – Nortriptyline, Imipramine, and Desipramine have higher safety and better tolerability than Amtriptyline
- Consider behavioral health/health psychology referral for sleep hygiene

Vitamin D
- Serum 25-OHD concentrations below 20 ng/ml are associated with poorer physical performance and a greater decline in physical performance in older men and women.
- Almost 50% of the elderly population have serum 25-OHD below 20 ng/ml

Vitamin D
- Measured as 25,OH vitamin D.
- Some studies suggest women are more sensitive to the effects of vitamin D deficiency than men.
- Has been discussed as being associated with
  - Worsening pain
  - Cognitive Impairment and Depression
  - Increased Cardiovascular Risk
  - Osteopenia and Osteoporosis
  - Diabetes and Hypertension

Energy Drink Effects
- Hypertension
- Sleep Disturbances
- Late Miscarriages, still birth and small for gestational age infants in pregnant women
- Headaches

Alcohol and Energy Drinks
- Higher volumes of alcohol per session
- Increase incidence of sexual Assault
- Increased incidence of Driving While Intoxicated
- Underestimation of impairment
- Increased risk of alcohol dependence
- Increased risk of non medical prescription drug use

The "High" Risk of Energy Drinks jAMA. January 25, 2011.
Substance Abuse Treatment Linked With Prenatal Visits Improves Perinatal Outcomes

- 49,985 women who completed Prenatal Substance Abuse Screening Questionnaires at obstetric clinics between 1 January 1999 and 30 June 2003, had urine toxicology screening tests and either live births or intrauterine fetal demises (IUFDs).
- The nonintervention group group had significantly worse outcomes than the Treatment group: preterm delivery, placental abruption and IUFD.

Definition - Fetal Alcohol Syndrome

- FAS is a serious developmental disorder caused by prenatal alcohol exposure of the fetus and characterized by:
  - Prenatal and/or postnatal growth retardation
  - Central nervous system dysfunction
  - Characteristic craniofacial abnormalities

Clinical Course - FAS

- Neurobehavioral Effects
  - Adolescence
    - Academic problems
    - Independent living problems
    - Conduct problems
  - Adulthood
    - Psychiatric problems
    - Memory problems
    - Behavior problems
Clinical Course-FAS

- Secondary Disabilities
  - Delinquency
  - Difficulty with employment
  - Difficulty with independent living

Women: Epidemiology

Prevalence of Alcohol Use in Pregnancy
- 16-35% of pregnant women drink
- 4% drink frequently or heavily

Women & Heavy Drinking

- Risk of health problems:
  - Alcohol-related liver disease, hepatitis, infections, anemia
  - STDs, UTIs, reproductive organ problems, breast cancer
  - Violence victimization risk
  - Neurocognitive effects

Marijuana and Pregnancy

- Babies born to women who used marijuana during their pregnancies display altered responses to visual stimuli, increased tremulousness, and a high-pitched cry.
- In school, marijuana-exposed children are more likely to show gaps in problem solving skills, memory, and the ability to remain attentive.

Current Substance Use among Pregnant Women Aged 15-44, by Age, 2006-2007 combined
Pregnant Methadone Maintenance Patients

- More likely to be
  - Younger
  - Have delayed onset of antenatal care
  - Smokers

Neonatal Abstinence Syndrome

- Irritability and sleep disturbances
- Sneezing
- Fist Sucking
- A shrill cry
- Watery stools
- General hyperactivity
- Ineffectual sucking
- Poor weight gain
- Dislike of bright lights
- Tremors
- Increased respiration rate

Buprenorphine and Pregnancy

- Chart review of 101 methadone-treated and 68 buprenorphine-treated pregnant women from the Maine Medical Center between 2004 and 2008
- Mother’s age, gestational age of the infant, form of delivery, comorbid conditions, other maternal medications (such as benzodiazepines or selective serotonin reuptake inhibitors) was the same for both groups
- Mean neonatal abstinence score was significantly lower in the buprenorphine group than in the methadone group (10.7 vs 12.5)
- 75% of neonates born to methadone-treated mothers required treatment for withdrawal, compared with 50% of those with buprenorphine-treated mothers
- Babies of mothers treated with methadone also stayed in the hospital longer after birth (mean of 15.7 vs 8.4 days)

Perinatal Outcomes

- Increased Risk Of
  - Preterm birth < 32 weeks of gestation
  - Small for gestational age infants (<10th percentile)
  - Admission to the neonatal unit
  - Congenital Abnormality

Non Opioid Drugs with Neonatal Abstinence Syndromes

- alcohol
- amphetamines
- barbiturates
- benzodiazepines
- diphenhydramine
- tricyclic antidepressants

Significant Pain Reduction in Chronic Pain Patients after Detoxification from High-dose Opioids

- 21 out of 23 patients reported a significant decrease pain after detoxification
- Doses from 45mg of hydrodione to 720 mg of oxycodone per day
- Pain at beginning of detox 8.0
- Pain at he end of detox 3.3

*Journal of Opioid Management Oct 36-Burrow*
Non-pharmacologic therapy

- Heat
- Prosthetic supports
- Physical therapy
- Exercise
- Cognitive-behavioral therapy
- Pain management consult with multimodality pain control
- Orthopedic Consultation

Non-pharmacologic therapy

- Yoga
- Relaxation Therapy
- Meditation
- Interventional pain therapy

Exercise is for Everyone

Sometimes Women With Chronic Pain and Problems with Addiction are Not Using Opiates

Their Children Are

- In 2008, 1.9 million youth (or 7.7 percent) age 12 to 17 abused prescription drugs
- 1.6 million (6.5 percent) abused a prescription pain medication
- Each day an average of 2,000 teenagers age 12 to 17 used a prescription drug without a doctor’s guidance for the first time.
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