UNDERSTANDING AND TREATING OPIATE USE DISORDER:
UTILIZING BEHAVIORAL (COGNITIVE-BEHAVIOR) APPROACHES

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Just let me know where we were and what you wish to receive and will attach to your email and return.

CARDWELL C. NUCKOLS HAS NO CONFLICTS OF INTEREST TO REPORT
LITHIATED LEMON SODA

The added citrates neutralize free acid. The sugar is inverted... burns clean. 7-Up is more than a mixer... It blends out the harsh features... Dispels hangovers... takes the "ouch" out of grouch.
April 09, 2019

Abrupt Discontinuation of Opioids Dangerous, FDA Warns

- Reports of "serious harm" in patients dependent on opioid painkillers who suddenly stop taking the medication, or rapidly decrease the dose, have prompted a drug safety communication issued today by the US Food and Drug Administration (FDA).

- Harms from abruptly stopping opioids or rapidly decreasing the dose include "serious withdrawal symptoms, uncontrolled pain, psychological distress, and suicide,"
UNDERSTANDING AND TREATING OPIATE USE DISORDER

- More than half of all Americans who abuse prescription opioids, and nearly 80 percent of heroin users, have high levels of involvement in the criminal justice system.

- Physical and mental health conditions, co-occurring substance use, and involvement in the criminal justice system were higher among individuals with any level of opioid use compared with individuals who reported no opioid use.

2015-2016 National Survey on Drug Use and Health
FENTANYL

– Fentanyl and other synthetic opioids do not generate a wave of drug initiation among youth or even necessarily stimulate greater demand... it appears to spread primarily among existing users when suppliers substitute fentanyl for another drug.

– Overdose deaths due to increasing lethality rather than by increasing the number of users

– ...fentanyl brought a wave of greater death and not a rising tide of more users.
HEROIN, FENTANYL AND CARFENTANIL OVERDOSE
TREATMENT CONSIDERATIONS

First Consideration:

Is the patient a candidate for rehabilitation or do they need habilitation?
TREATMENT CONSIDERATIONS

If Habilitation, Emphasis is on:

Neuroplastic development of the prefrontal cortex

Staff as healthy family (setting healthy behavioral limits)

Discharge planning

“Wrap around” services
Second Consideration: Where is the patient in regard to their desire to change?
TREATMENT CONSIDERATIONS

–If patient is in *precontemplation* or *contemplation* (*Stages of Change Model*), the use of Motivational Interviewing techniques are warranted

–*Education and assessment can serve as confrontational tools*
TREATMENT CONSIDERATIONS

Third Consideration:

*Is there presence or absence of a recovery-oriented environment and/or support system?*

RECOVERY CAPITAL
RECOVERY SAFETY PLAN

A recovery safety plan involves 3 parts. The first part helps each client identify how they will know they need to activate their safety plan. The second part dictates a place of physical/psychological safety to which they will go as quickly as is possible. The third is a list of who they will contact as soon as they can.
RECOVERY SAFETY PLAN

PART I. *I will know I am in trouble and need to activate my recovery safety plan if any of the following occur:*

1. ___________________________________________________________
2. ___________________________________________________________
3. ___________________________________________________________
4. ___________________________________________________________
5. ___________________________________________________________
RECOVERY SAFETY PLAN

PART II. If I experience any of the above, I will go to one of the following places as soon as I can get there.

1. _______________________________________
2. _______________________________________
3. _______________________________________


PART III. If I experience any of the above, I will contact the following people as soon as I possibly can.

1. _______________________________________

2. _______________________________________

3. _______________________________________

1. __________________________________________
2. __________________________________________
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TREATMENT CONSIDERATIONS

Fourth Consideration:

Understanding and treating the patients that struggle with or without self-injurious behavior

History of trauma with or without self-injurious behavior

Co-Occurring Disorders

Earlier onset of alcohol and drug use and other self-destructive behaviors

High levels of distress (Neuroticism)
TREATMENT CONSIDERATIONS: OPIATES AND TRAUMA

- Relieves stress
  - Action on mu receptors on amygdala
- Feeling of being warm, fed and cared for
- Dissociation from negative feeling states
- Cognitively intact
- Dopamine high and enhanced sense of well-being
  - Dopamine signal from reward center to prefrontal cortex
Fifth Consideration

YOU ARE NEUROPLASTICIANS!

WHAT ENHANCES PLASTICITY?

– NOVELTY
– THERAPEUTIC RELATIONSHIPS
– PHYSICAL EXERCISE
– MINDFULNESS
– ENRICHED ENVIRONMENT
NUCLEUS BASALIS
TREATMENT CONSIDERATIONS
NEUROPLASTICITY

THE NUCLEUS BASALIS IS...

NOVELTY

THE MODULATORY CONTROL CENTER FOR PLASTICITY
TREATMENT CONSIDERATIONS

– MANAGING NEGATIVE FEELINGS
  – Management strategies such as behavioral (cognitive-behavioral) options (see APPENDIX ONE)

– EDUCATION TO CHANGE BEHAVIOR

– SLEEP (see APPENDIX TWO)
TREATMENT CONSIDERATIONS

– The most effective treatments for opiate addiction at this point are behavioral therapies, such as cognitive-behavioral and contingency-management interventions.

– Contingency management interventions, provides tangible incentives in exchange for engaging in treatment and maintaining abstinence.
TREATMENT CONSIDERATIONS: MOTIVATIONAL INCENTIVES FOR ENHANCED DRUG ABUSE RECOVERY

Volunteers assigned to receive usual care (TAU) or usual care supplemented by a motivational incentive program.

Those subjects in the motivational incentive group will be given the opportunity to receive tangible incentives twice weekly based on drug-free urine test results.
TREATMENT CONSIDERATIONS: MOTIVATIONAL INCENTIVES FOR ENHANCED DRUG ABUSE RECOVERY

- RESULTS

- Retention in Treatment for the 12-week period
  - Control group- 35%
  - Incentive Group- 50%

- Group Attendance
  - Control group- 52%
  - Incentive Group- 76%
TREATMENT CONSIDERATIONS: MOTIVATIONAL INCENTIVES FOR ENHANCED DRUG ABUSE RECOVERY

Use negative urine as objective evidence
Collect urines frequently
Test on-site (immediate feedback)
Provide immediate rewards for negative UA
Vouchers or drawing for prizes
TREATMENT CONSIDERATIONS: MOTIVATIONAL INCENTIVES FOR ENHANCED DRUG ABUSE RECOVERY

Start with attendance incentive to improve early engagement

- Shift to abstinence after attendance well established
- Shift to life-style change goals after abstinence well established
TREATMENT CONSIDERATIONS:
EDUCATION FOR BEHAVIORAL CHANGE

-Cognitive deficits in chronic drug abuse
  - Cognitive symptoms during early recovery
    - Cocaine-deficits in cognitive flexibility
    - Amphetamine-deficits in attention and impulse control
  - Opioids-deficits in cognitive flexibility
    - Ethanol-deficits in working memory and attention
    - Cannabis-deficits in cognitive flexibility and attention
    - Nicotine-deficits in working memory and declarative learning
TREATMENT CONSIDERATIONS:
EDUCATION FOR BEHAVIORAL CHANGE

– Utilize short and simple didactic or film clips to teach basic recovery points

– Use a feedback mechanism to determine comprehension
  – I think…………………………………………………………………………
  – I feel…………………………………………………………………………
  – I learned……………………………………………………………………
  – My future behavior will change…………………………………………
SLEEP

– Consider using the program called Conquering Insomnia which can be found at CBTforINSOMNIA.com or teach basic sleep hygiene
– Evidence-based program developed by Dr. Greg Jacob at Harvard Medical School and funded by a NIH grant
– In a study conducted at Harvard was found to be more effective than Ambien
SLEEP HYGIENE

- Go to bed and get up at the same times each day. ■ Use natural light (that comes through a window) to remind yourself of when it’s time to be asleep and awake. This can help you set a healthy sleep-wake cycle. ■ Exercise regularly. ■ If you take naps, keep them short and before 5 p.m. ■ Don’t eat or drink too much when it is close to bedtime.
SLEEP HYGIENE

- Avoid caffeine (in coffee, tea, chocolate, cola, and some pain relievers) and nicotine for several hours before bedtime.

- Wind down before going to bed (e.g., take a warm bath, do light reading, practice relaxation exercises).

- Keep the bedroom a relaxing place—avoid working or paying bills in bed.

- Sleep in a dark, quiet room that isn’t too hot or too cold.

- Don’t lie in bed awake. If you can’t fall asleep within 20 minutes get up.
SLEEP

- The journal SLEEP demonstrated online CBT program for insomnia effective for improving sleep in 80% of patients
- The interactive version in a study by NIH showed it was comparable to the results garnered from face-to-face CBT
- Wake time after sleep onset was reduced from over an hour to less than 30 minutes per night
- Sleep onset latency decreased from over 30 minutes to less than 20 minutes per night
- Total sleep time increased about an hour
SLEEP

– INSOMNIA

– 5 session interactive program
  – SESSION 1: BASIC FACTS ABOUT SLEEP
  – SESSION 2: SLEEP SCHEDULING AND STIMULUS CONTROL
  – SESSION 3: COGNITIVE RESTRUCTURING AND SLEEP MEDICATION TAPERING TECHNIQUES
  – SESSION 4: DAYTIME RELAXATION TECHNIQUES
  – SESSION 5: BEDTIME RELAXATION TECHNIQUES
SLEEP

– PHARMACOTHERAPY

– **Melatonin** - a metabolite of serotonin is a hormone secreted by the pineal gland; plays a role in maintenance of sleep-wake cycle (suprachiasmatic nucleus)

– **Valerian** (could damage the liver)

– **Tryptophan** - precursor amino acid to serotonin

– **Antidepressants** - Trazodone is a popular choice although not backed by formal clinical studies

– **Quetiapine** (Seroquel) and gabapentin (mixed results)
SLEEP

- Transcranial Electrical Stimulators
  - Stimulates the brain to produce serotonin and melatonin while reducing cortisol (the stress hormone) and calming the brain's Default Mode Network. The device is effective in treating the following types of insomnia:
    - Chronic Insomnia
    - Onset Insomnia
    - Comorbid Insomnia
    - Maintenance Insomnia: Difficulty staying asleep through the night (waking up often or waking up too early).
SERENITY

MOST PEOPLE EXPERIENCE SERENITY AFTER EXPERIENCING LONG BATTLES, RATHER THAN AVOIDING THEM
APPENDIX

- ONE: MANAGING NEGATIVE FEELING STATES
- TWO: SLEEP
- THREE: RECOVERY SAFETY PLAN
- FOUR: KRATOM
- FIVE: FDA-ABRUPT DISCONTINUATION
MANAGING NEGATIVE FEELING STATES

– TWO MINUTES OF SILENCE (continued)

– The “default mode” gathers and evaluates information. Focused attention curtails this scanning activity.

– It is observed most closely during the psychological task of reflecting on one’s personality and characteristics (self-reflection).

– It integrates external and internal information (Joseph Moran, Frontiers in Human Neuroscience, 2013).

Gross, DA. “This is Your Brain on Silence.” Brain in the News. September 2016, pgs. 5-6.
MANAGING NEGATIVE FEELING STATES

- **DANCE**
  - By yourself put on music that makes you feel like moving
  - Let your body lead
  - When you start to tire gradually slow down
  - Take two minutes in silence to appreciate the changes that have occurred in your brain’s emotional system

- **BREATHING FROM YOUR HEART (HEARTMATH)**
  - Focus on the area of your chest that houses your heart
  - Breath in and out from the heart
MANAGING NEGATIVE FEELING STATES

- **BREATHING FROM YOUR HEART**  
  (HEARTMATH) (continued)

- The breathes should be a little deeper than usual
  - 5-6 seconds on the in-breath and 5-6 seconds on the out-breath

- Appreciate the differences in your feeling state

- **APPRECIATION BREATHE**

  - 2-3 times per day

  - Bring into your mind something or someone you appreciate
MANAGING NEGATIVE FEELING STATES

– **APPRECIATION BREATHE** (continued)

– Might consider using a nice note or email from a friend that you carry with you

– Could be a prayer or Bible verse

– Discern the changes you experience as you read or recall the positive experience

– **BE OF SERVICE**

– “I’VE LEARNED THAT PEOPLE WILL FORGET WHAT YOU SAID, PEOPLE WILL FORGET WHAT YOU DID, BUT PEOPLE WILL NOT FORGET HOW YOU MAKE THEM FEEL.” Maya Angelou
MANAGING NEGATIVE FEELING STATES

– *BE OF SERVICE* (continued)

– Focus on your environment
– Remember everything is God
– Kindly act to be of service to people, places and things
– Notice how your feelings change as you direct love outward
– The more you give of yourself the more we are filled with Love
MANAGING NEGATIVE FEELING STATES

- LETTING GO

- Letting go is a mechanism of the mind and causes a sense of relief and lightness

- Example: I was with a friend and we were talking about all of the problems we had to deal with on a work project. We both broke out in laughter. The problems still existed but they were no longer our problems (i.e. some deficit in us)

- Technique: Letting go consciously and frequently at will

- NO LONGER THE VICTIM
MANAGING NEGATIVE FEELING STATES

- WELCOMING PRAYER

- Become aware of a feeling (sensation) without labeling the sensation, venting, resisting, moralizing and judging
- Ignore all thoughts as they are just excuses and get us nowhere
- Let the sensation in and just stay with it
- Let it run its course without trying to make it different; just let the energy run out
MANAGING NEGATIVE FEELING STATES

-WELCOMING PRAYER (continued)

-If stay with anger, hatred, resentments and self-pity...

-All have *secondary gains* (*THE VICTIM*)

-It is our ego-mean, competitive, cheap, mistrusting, vindictive, judgmental, guilty, ashamed, vain (little energy) and resentful
MANAGING NEGATIVE FEELING STATES

– OTHER APPROACHES

– Grounding
– Taking a walk in nature
– Playing with dogs, cats and small children
– Taking a shower
– Writing in a journal
– Listening to certain music such as classical, improvisational jazz, Tibetan Incantations, Gregorian Chant, etc.
– Physical exercise
SLEEP

– Several studies have reported changes in patterns of sleep with progressive abstinence from opiates. At around 5–7 days of acute abstinence from chronic heroin use, decreased total sleep time, slow-wave sleep, REM, and stage 2 sleep and increased sleep latency, wake after sleep onset, and REM latency compared to healthy sleepers.
SLEEP

During the first 3 weeks of abstinence, prolonged sleep latency, decreased sleep efficiency, decreased TST, increased arousal index, increased stage 1 and 2, and decreased slow-wave sleep were prominent compared to healthy sleepers. After 6 weeks and up to 6 months of abstinence from methadone, there is a rebound increase in SWS and REM time to a higher level than baseline.
SLEEP

– More than three-quarters of persons receiving methadone maintenance therapy still report sleep complaints

– Forty-two patients with opiate use disorder were treated with either methadone or buprenorphine and gradually tapered down over the course of 2–3 weeks. Buprenorphine-treated patients had 2.5% lower sleep efficiency and 9% shorter actual sleep time
SLEEP HYGIENE

- Go to bed and get up at the same times each day. ■ Use natural light (that comes through a window) to remind yourself of when it’s time to be asleep and awake. This can help you set a healthy sleep-wake cycle. ■ Exercise regularly. ■ If you take naps, keep them short and before 5 p.m. ■ Don’t eat or drink too much when it is close to bedtime.
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RECOVERY SAFETY PLAN

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**RECOVERY SAFETY PLAN**

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<thead>
<tr>
<th>NAME</th>
<th>PHONE</th>
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1. __________________________________________
2. __________________________________________
3. __________________________________________
KRATOM

– Kratom (Mitagyna speciose) is a tropical evergreen tree in the coffee family whose leaves have been used for centuries in South Asian countries as a stimulant and pain reliever.

– Drug Enforcement Administration (DEA) and various state authorities have either banned or considered banning the substance. Currently, kratom is legal to purchase in all but six US states.
KRATOM

– The following jurisdictions have banned the sale of kratom: Alabama, Arkansas, Indiana, Tennessee, Vermont, Wisconsin, and the local communities of Sarasota, Florida, and Jerseyville, Illinois. There is a handy state-by-state map at http://speciosa.org/home/kratom-legality-map, which will help you keep on top of the latest legislation.
Many people with either current or former opioid use disorder believe that kratom has helped them end their addiction or manage their cravings more effectively. Other consumers maintain that kratom helps them manage various ailments, such as restless leg syndrome, anxiety disorders, insomnia, and chronic pain. Still others blatantly praise the substance as a great legal high.
KRATOM

– Comes in various forms, including a powder that is dissolved in tea or another clear liquid, tablets, liquids, gum/resin, concentrated extracts, and a drug patch

– Mitragynine, as well as the alkaloid 7-hydroxymitragynine, have an influence on opioid receptors, acting as partial agonists with mu-opioid receptors (Kruegel AC and Grundmann O, Neuropharmacology 2017. doi:/10.1016/j.neuropharm.2017.08.026).
KRATOM

- Stopping kratom use after dependence can produce physical withdrawal symptoms that are similar to opioid withdrawal, such as muscle spasms, insomnia, watery eyes, runny nose, nausea, vomiting, and decreased appetite. Psychological withdrawal symptoms, including restlessness, tension, anger, and depression, have also been reported (Preely VR. Neuropathology of Drug Addictions and Substance Misuse, Volume 3. Cambridge, MA: Academic Press; 2016).
KRATOM

The Centers for Disease Control & Prevention (CDC) reports that kratom abuse can lead to agitation, irritability, tachycardia, nausea, drowsiness, and hypertension. On user forums, the most common reported side effects are nausea and vomiting, which appear most commonly in kratom-naïve users.
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- The agency is requiring changes to the prescribing label for these medicines that are intended for use in the outpatient setting. These changes are designed to promote safe tapering or discontinuing of opioids in patients who are physically dependent on the medication.

- The specific recommendations for clinicians outlined in today's safety communication include the following:

  - Do not abruptly discontinue opioids in patients who are physically dependent. Counsel them to not discontinue the medication on their own without first discussing the need for a gradual tapering regimen.
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Abrupt Discontinuation of Opioids Dangerous, FDA Warns

– Ensure ongoing care of the patient and agree on an appropriate tapering schedule and follow-up plan so that patient and provider goals and expectations are clear and realistic.

– When deciding how to discontinue or taper therapy, consider a variety of factors. These include the dose of the opioid analgesic the patient has been taking, the duration of treatment, the type of pain being treated, and the physical and psychological attributes of the patient.

– There are no standard opioid-tapering schedules that are suitable for all patients. A patient-specific plan should be used to taper the dose gradually.
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– In general, for patients who are physically dependent on opioids, taper by an increment of no more than 10% to 25% every 2 to 4 weeks. It may be necessary to provide the patient with lower-dosage strengths to accomplish a successful taper.

– If the patient is experiencing increased pain or serious withdrawal symptoms, it may be necessary to pause the taper for a period of time, raise the opioid analgesic to the previous dose, and then once stable, proceed with a more gradual taper.
When managing patients taking opioid analgesics, particularly those who have been treated for a long duration and/or with high doses for chronic pain, ensure that a multimodal approach to pain management, including mental health support (if needed), is in place prior to initiating an opioid analgesic taper. This may help optimize the treatment of chronic pain, as well as assist with the successful tapering of the opioid analgesic.

Patients who have been taking opioids for shorter time periods may tolerate a more rapid taper.

Frequent follow-up with patients is important. Reassess the patient regularly to manage pain and withdrawal symptoms that emerge.
April 09, 2019
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– Monitor patients for suicidal thoughts, use of other substances, or any changes in mood during the process.

– When opioid analgesics are being discontinued due to a suspected substance use disorder, evaluate and treat the patient, or refer them for evaluation and evidenced-based treatment of the substance use disorder.