COMPLEMENTARY & INTEGRATED CARE FOR SUBSTANCE USE DISORDER

AMY DE LA GARZA MD
BEHAVIORAL HEALTH ECHO
OCTOBER 17, 2019
DEFINITIONS

• “The mission of NCCIH is to define, through rigorous scientific investigation, the usefulness and safety of complementary and integrative health interventions and their roles in improving health and health care.”

• Conventional Medicine – mainstream healthcare modalities originating from a Western medical approach

• Non-conventional Medicine – healthcare modalities not considered mainstream whose origins are typically outside of Western practices

• Complementary Medicine – Using conventional and non-conventional modalities TOGETHER to address a patient or diagnosis
  • Example: Oral contraceptives together with acupuncture to treat dysmenorrhea

• Alternative Medicine – Using non-conventional modalities IN PLACE of conventional treatments
  • Example: Using acupuncture alone to treat dysmenorrhea
DEFINITIONS

• Integrated Medicine – Brings together conventional medicine and complementary approaches to treat the patient in a holistic, coordinated fashion to provide the best possible outcome.
  • Patient-Centered Approach rather than a Symptom-Centered approach
  • Coordination of care between providers is ESSENTIAL
  • Addresses physical, mental, emotional, social aspects of a human’s life

• Examples of most commonly used complementary approaches
  • Natural products including vitamins, minerals, probiotics
  • Mind-Body Practices
    • Yoga
    • Acupuncture
    • Chiropractic
    • Meditation or Mindfulness
    • Hypnotherapy

• Homeopathy or Naturopathic Medicine, Functional Medicine, Ayurvedic Medicine

• Example: Using a combination of acupuncture and botanicals to treat dysmenorrhea

National Center for Complementary and Integrative Health
http://nccih.nih.gov
DEFINITIONS

“**Wellness** is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity.” – The **World Health Organization**.

Wellness is the ACTIVE process of making choices in our lives that promote health and well-being in multiple dimensions.

“The Substance Abuse and Mental Health Services Administration’s (SAMHSA) Wellness Initiative envisions a future in which people with mental or substance use problems pursue health, happiness, recovery, and a full and satisfying life in the community. “

DEFINITIONS

“The Functional Medicine model is an individualized, patient-centered, science-based approach that empowers patients and practitioners to work together to address the underlying causes of disease and promote optimal wellness.”

Functional Medicine utilizes functional lab testing, intensive behavioral interventions to address nutrition, exercise, stress-management, sleep, and relationship domains and an integrated approach to prevention and treatment of chronic disease.

Substance Use Disorder is a chronic disease of the brain, and should therefore be addressed in an integrated fashion utilizing all of the modalities we apply to other chronic diseases.

These should include life-style modifications, nutritional products and botanicals, mind-body therapies and a doctor-patient relationship that supports our patients' pursuit of WELLNESS rather than just the ABSENSE of their disease.
COMPLEMENTARY THERAPIES FOR SUD

• Complementary NOT Alternative

• Complementary modalities should be utilized ONLY as ADJUNCTIVE therapies to evidence-based medical and behavioral treatments based on the unique needs of the patient and their given diagnoses

• The literature regarding complementary therapies for SUD is difficult to interpret due to small sample sizes, less than optimally designed studies, and conflicting results even between similarly designed studies

• Keep in mind that people suffering from SUD are too–often lured into expensive complementary treatments with the false hope of TREATMENT

• First do no harm
COMPLEMENTARY THERAPIES FOR SUD

- N-Acetylcysteine
- Kudzu Extract
- Oxytocin
- Acupuncture
- Hypnotherapy
- Mindfulness Based Interventions
- Yoga
- Music Therapy
N-ACETYLCYSTEINE (NAC)

- OTC antioxidant which is thought be helpful in SUD by reducing glutamate in areas of the brain where an excess of glutamate may potentiate compulsive behaviors in SUD
- Stimulant use disorders – may reduce relapse in patients who are currently abstinent
- Cannabis use disorder – may improve abstinence, specifically in adolescents when combined with contingency management
- Less evidence for tobacco and alcohol use, further research is needed
- Dosing ranges from 1200 to 2400 mg per day

KUDZU

• Chinese herbal root which has been used since at least 600 AD to reduce “drunkenness”

• Contains isoflavones which are anti-inflammatory compounds found in legumes

• Multiple proposed mechanisms of action for mitigating the effects of alcohol and therefore reducing consumption

• Lukas et al 2005 – significant reduction in number of beers consumed after 7 days of treatment (1,000 mg TID) with kudzu extract in “male and female” heavy drinkers

• Lukas et al 2013 – significant reduction over 4 weeks of treatment of male heavy drinkers (1,000 mg TID) in number of drinks/week, number of heavy drinking days, number of consecutive abstinent days

• Penetar et al 2015 – significant reduction of beers consumed in one setting 90 minutes after single 2 gram dose in male heavy drinkers
KUDZU

- Cravings for alcohol were not reduced in any of these studies
- No significant side effects, known SE include headache and nausea
- No negative effects on renal or liver function
- May be a useful adjunctive treatment for AUD as well as in reduction of binge drinking episodes in patients without diagnosis of AUD
- 2005 study “male and female” was really 11 males, ? Use in females, some evidence of estrogenic activity
- 60 capsules $29.95
KUDZU


**OXYTOCIN**

- 9 unit neuropeptide which can be delivered intranasally and crosses the BBB
- Early clinical work suggests OT may decrease development of PTSD in patients with high acute PTSD symptoms by mitigating stress response
- OT may enhance therapeutic connection in patients with PTSD as well as decrease isolation and avoidance
- Mitigating stress response may reduce return to use of substances, OT may also reduce cravings
- Small trial in patients undergoing lorazepam treatment for alcohol withdrawal, patients treated with OT had reduced withdrawal symptoms and lorazepam use
- Small trial in patients using marijuana treated with OT had reduces cravings and stress scores
- OT reduced desire to smoke and cigarettes smoked in subjects randomized to 40 units intranasal OT versus placebo
OXYTOCIN


ACUPUNCTURE
ACUPUNCTURE

- Whole body acupuncture, auricular acupuncture and acupressure, laser acupuncture and trans-cutaneous electric acupoint stimulation are modalities utilized in studies.

- Mead et al. – Transcutaneous Electric Acupoint Stimulation in addition to buprenorphine/naloxone reduces withdrawal symptoms and decreases return to use of opioids and other substances.

- He et al. – Combined whole body, ear acupuncture and acupressure significantly reduces smoking in motivated patients seeking treatment and the effect may last 18 months.

- Behere et al. – despite positive findings that various types of acupuncture may improve alcohol, cocaine, and opioid related outcomes, studies provide equivocal results and further study is needed.

- Wang et al. – review of evidence for acupuncture and smoking suggests it may be superior to no treatment and is safe, but larger trials with clearly defined treatment protocols are needed.

- NCCIH – There is not enough data to support the use acupuncture for treatment of SUD but may be helpful as adjunctive therapy, no firm conclusions about efficacy for smoking.
ACCUPUNCTURE

• 5 point auricular acupuncture and acupressure developed 30 years ago primarily for use in detoxification from cocaine and opioids

• Physicians can be trained to deliver treatment in Utah

• There are many observational and small randomized trials studying NADA in patients with tobacco, alcohol, opioid, and stimulant use disorders with equivocal results

• Acupuncture studies are difficult to conduct due to “blinding” issues, variability in treatment delivery – timing, number of sessions, needle placement

• NADA is also very helpful for insomnia, anxiety, pain, and stress relief in clinical setting
ACUPUNCTURE

• “Although it does not have the compelling force of large replicated RCT’s, the preponderance of small varied trials collectively paints a picture supporting acudetox as an “evidence-based practice.”


http://acudetox.com
ACUPUNCTURE


HYPNOTHERAPY

- NCCIH – Safe but not enough evidence in support of hypnotherapy for smoking cessation

- Hasan et al. – RCT of hospitalized patients comparing hypnotherapy and hypnotherapy plus NRT to NRT alone
  - Hypnotherapy and Hypnotherapy with NRT patients more likely to be abstinent at 12 and 26 weeks post-hospitalization but was not statistically significant

- 2019 Cochrane Review Hypnotherapy for Smoking Cessation - 14 studies 1926 patients comparing hypnotherapy to behavioral interventions or no intervention
  - Only one study, comparing hypnotherapy to no intervention, showed a benefit for hypnotherapy but the study was small and had problems with its methods
  - No evidence that hypnotherapy was better than other interventions
HYPNOTHERAPY


MINDFULNESS BASED INTERVENTIONS

- MBI include Mindfulness Based Stress Reduction (MBSR), Mindfulness Based Cognitive Therapy (MBCT), Mindfulness Based Relapse Prevention (MBRP), Spiritual Self Schema Therapy (3S-therapy) and to a lesser extent Dialectical Behavioral Therapy (DBT) and Acceptance and Commitment Therapy (ACT)

- NCCIH – MBI significantly reduces use of alcohol, opiates, and cigarettes

- 2014 Systematic review in Substance Use and Misuse
  - 24 articles
  - Multiple MBI’s studies for various substances
  - MBI significantly reduces use of alcohol, cocaine, amphetamines, marijuana, opiates and tobacco compared to support groups or other behavioral interventions

MINDFULNESS ORIENTED RECOVERY ENHANCEMENT

• Eric Garland – Center on Mindfulness and Integrative Health Intervention Development, University of Utah College of Social Work

• MORE was designed by Dr. Garland and is an evidence-based adjunctive treatment for patients with addiction, chronic pain, and stress

• MORE significantly reduces cravings, stress, and pain in patients with OUD on methadone maintenance

• MORE improves positive affect, reduces pain, and reduces risk of opioid misuse in patients with chronic pain on long-term opioid therapy


MINDFULNESS ORIENTED RECOVERY ENHANCEMENT

• Physicians and therapists can be trained by Dr. Garland to deliver MORE to their patients
  Contact Eric Garland directly for information regarding training
  eric.garland@socwk.utah.edu
  Website: http://drericgarland.com

• Ongoing study with active recruitment of patients with chronic pain on daily opioid therapy. If you have a patient that would benefit from treatment contact Dr. Garland’s team!
  mathias.sanyer@utah.edu
  amy.watson@utah.edu
YOGA

• There are many studies evaluating yoga for depression, anxiety and stress but few evaluating yoga for substance use disorder, many combine yoga and mindfulness and are difficult to interpret.

• Review of yoga and mindfulness in the treatment of SUD

• NCCIH – Few studies available regarding yoga and SUD
  • Yoga and meditation may assist in smoking cessation programs
  • Yoga may improve smoking cessation in women
  • Exercise including yoga make reduce cravings for cigarettes
MUSIC THERAPY

- Music Therapy (MT) - music intervention is delivery by a certified music therapist

- Music Based Intervention (MBI) – music intervention is not delivered by a certified therapist

- Types of therapies – Listening to music for relaxation, lyric analysis, song-writing, performance, playing instruments, single session versus multiple in different treatment settings

- Diverse outcome measures – depression scores, motivation, participation, stress-reduction, but no specific measures related to retention or abstinence after treatment

- Certainly MT and MBI provide opportunities for self-expression, coherence, and participation but evidence regarding SUD specific outcomes are lacking and RCT of these interventions could be difficult to implement and replicate
MUSIC THERAPY

• NCCIH – Music therapy is safe and may improve emotional and motivational outcomes in treatment settings, but outcomes related specifically to SUD are unclear.

Rock to Recovery provides professional musicians in recovery to engage in a songwriting process with NON-musicians in treatment.

What Happens in a Rock to Recovery Session

• Playing music and singing disrupts obsessive thought patterns.
• Important “feel good” chemicals are released, including Oxytocin, serotonin, and dopamine.
• Because the therapy is fun, individuals stay in treatment longer.
• Check-in and lyric writing processes reinforce progress and provide information for other groups.
• Individuals do something they are proud of and work together, forming supportive relationships.
• Though fun, Rock to Recovery is a form of therapy. Providers can write group notes and the group may be billed to insurance.

About Rock to Recovery

• Rock to Recovery is a nationwide organization, providing more than 500 sessions a month in 100+ facilities in four states.
• R2R works nationally and internationally with the Air Force Wounded Warrior program through a contract with the Department of Defense.
• The organization provides services to youth, veterans, those overcoming trauma, substance use disorders, and mental health issues.

http://rocktorecovery.org
• OVERCONSUMPTION, especially of dietary fats is strongly associated with substance use

• Reduced consumption of micronutrients, especially vitamins, is associated with substance use, most likely secondary to reduction of neurotransmitter production

• The western diet, high in fat, sugar, and processed foods is associated with depression and anxiety which may (LIKELY) contribute to SUD

• Disruptions to the gut microbiome associated with AUD increase neuroinflammation which leads to anxiety, further alcohol craving and increased alcohol use.

• Substitution of sugar for opioids in early abstinence, as well as increased consumption of “highly palatable foods” and weight gain in early recovery are well documented
NUTRITION

• Nutrition services and education in SUD programs, provided individually or in groups, may be associated with improved treatment outcomes

• Further research regarding nutrition assessment, treatment and monitoring throughout the continuum of SUD care should be a PRIORITY

• ALL patients, and I would argue ESPECIALLY those with behavioral health and SUD diagnoses deserve to be evaluated, educated and treated with interventions that will improve their health and wellness in the PHYSICAL domain
“Old wisdom from the recovery community would suggest that a liberalized approach to sweets, nicotine and caffeine is favorable to help the individual get past the immediate crisis. New wisdom suggests that this behavior is a form of cross addiction that should be addressed early in recovery.”

David Wiss MS RDN

http://nutritioninrecovery.com
NUTRITION


A FEW LAST THINGS

• Exercise makes everything better – exercise should be “prescribed” during SUD treatment

• Opioid induced androgen deficiency is real, patients should have their hormones evaluated and optimized

• Progesterone may decrease cravings and attenuate use in women with tobacco and other SUD.

• Treatment of SUD should proceed as would the treatment of any other chronic disease; A patient-centered, holistic, and integrated approach to guide patients on their path to WELLNESS.
Thank you!
Join our next session on October 24th on
Cannabis Use with
Dr. Elizabeth Howell