Substance Use, Part III

Professional Care: Complementary and Integrative Health

Complementary and integrative health (CIH) practices (sometimes described as mind-body practices) are a heterogeneous group of therapeutic modalities that may provide benefit, especially when added to the traditional treatments for SUDs. They can also be effective for improving self-care, which is vital to SUD recovery. CIH therapies include meditation, deep breathing, Guided Imagery, massage, movement therapies, relaxation techniques, acupuncture, yoga, tai chi, qi gong, hypnotherapy, music therapy, supplements, and herbals. Overall, research on complementary and integrative interventions as treatments for SUDs is limited by a relatively modest number of clinical trials, especially randomized clinical trials (RCTs), addressing a given intervention, with small sample sizes, and heterogeneity and limitations of the utilized methodology. The RCT design is considered “gold standard” for evaluating efficacy of therapeutic modalities. Rigorous design (e.g., RCT), adequate power (appropriate sample size for testing of a given hypothesis), and high-quality study conduct are crucial for reducing the risk of bias and error and ability to draw accurate conclusions. Therefore, more adequately powered, rigorous RCTs are needed to establish conclusive evidence on the efficacy of the majority of complementary approaches. For additional information, refer to “Complementary Approaches: A Glossary and Where You Can Learn More” and “Substance Use Disorder Treatment: Complementary and Integrative Health Approaches” Integrative Health tool.

Overall, although many CIH practices are safe for most people, it is best for patients to consult with their clinical teams prior to engaging in a particular CIH modality. For example, caution may need to be taken with any type of meditation practice in those with underlying substantial mental health issues (e.g., untreated PTSD); these patients should consult with their mental health clinician before beginning a meditation program.

Mindful-Awareness Meditation

Mindfulness meditation is a practice that trains the mind in applying nonjudgmental attention and acceptance to present moment experiences (Please see “Mind and Emotions” section in Part II for more details). In recent years, mindfulness-based interventions have become the most commonly evaluated and applied meditation interventions in clinical and nonclinical settings, with research supporting their efficacy for various mental health and physical health conditions, including SUD. In addition to its potential positive impact on recovery outcomes, mindfulness meditation-based interventions have shown benefits for depression, anxiety, pain, and stress coping, and may be effective for PTSD symptoms, all common problems among Veterans and documented relapse risk factors in SUDs and addiction.

Mindfulness-based approaches, especially when adjunctive to standard-of-care treatments, can help improve outcomes in SUDs, however, it is unclear which persons with SUDs might benefit most from mindfulness training. Specific mindfulness-based interventions evaluated in research settings for SUD recovery include Mindfulness-Based Stress Reduction (MBSR), the most common mindfulness-based program used in medical settings, and Mindfulness-Based Relapse
Prevention (MBRP), which was developed specifically for those with addiction. Both programs have shown some efficacy for relapse prevention in SUD recovery. Other mindfulness-based or mindfulness-including programs evaluated in research settings include Vipassana meditation; Mindfulness-Based Cognitive Therapy (MBCT); Acceptance and Commitment Therapy (ACT); and Dialectical Behavior Therapy (DBT). Such practices are considered safe overall; no serious adverse effects have been reported in relation to mindfulness practice.

Transcendental Meditation
Transcendental Meditation (TM) practice involves concentrating on and repeating a short phrase (“mantra”) in one’s mind for a given length of time. Evidence on the efficacy of TM for SUD recovery is less extensive than for mindfulness meditation. Limited evidence suggests potential benefits of TM practice for decreasing drug, alcohol, and tobacco use.

Yoga
Yoga is generally considered safe and healthy when practiced appropriately. It is important for the clinician to discuss the risks and benefits of yoga with patients, as some poses should be avoided in patients with certain health conditions. Yoga can be helpful for relieving inner and outer tension and increasing a sense of well-being and connection with oneself. Although preliminary evidence suggests yoga may be a beneficial adjunct treatment, more research is needed to draw firm conclusions about the efficacy of yoga as an SUD treatment modality.

Qi Gong
Qi gong is a technique that combines mental focus, deep breathing, and gentle physical movement. Preliminary evidence suggests potential benefits of qigong in reducing withdrawal symptoms, craving, and anxiety in SUDs, but more research is needed.

Massage
Massage can be helpful for relaxation, rejuvenation, and alleviation of muscle tension, and many people find it an enjoyable component of self-care. Preliminary research has shown potential benefit of massage for reducing symptoms of alcohol withdrawal and reducing anxiety in alcohol, cocaine, and opioid withdrawal; more research is needed to offer conclusive evidence.

Acupuncture
Acupuncture is generally considered safe when performed by an experienced practitioner using sterile needles. Although acupuncture is usually well-tolerated when properly administered, it is important to discuss the potential risks of acupuncture in patients with certain medical conditions or who use medications increasing the risk of bleeding. Limited research evaluating the efficacy of acupuncture has produced mixed results, providing minimal evidence for its potential benefits as an adjunctive treatment for SUDs. One review and meta-analysis however, noted promise of acupuncture for reducing alcohol craving and withdrawal symptoms in those with alcohol use disorder.

Energy Therapies
Energy therapies (e.g., Reiki, therapeutic touch) rely on the channeling of bioenergy fields through the practitioner’s hands into the body of the patient, with the goal of restoring healthy
energy flow and balance, and improving health.\textsuperscript{23} There is no conclusive evidence to date supporting the efficacy of energy-based therapies for substance use disorder potential of transcranial magnetic stimulation (TMS) for reducing craving and substance use in alcohol, stimulant, and especially nicotine use disorders.\textsuperscript{24-26}

**Biofeedback**

Biofeedback therapy is a process that involves training individuals to deliberately regulate bodily functions (e.g., breathing, heart rate, blood pressure) for overall health improvement.\textsuperscript{23} There is very limited research on the impact of biofeedback on addiction outcomes, however preliminary evidence suggests potential benefits of electroencephalogram-based biofeedback for decreasing craving and mental health problem severity, and increasing abstinence rates in those with SUDs.\textsuperscript{27,28}

**Clinical Hypnosis**

Clinical hypnosis is another possible tool that may help manage one’s internal landscape and response to triggers. There is only limited research regarding its efficacy in the treatment of SUDs. One preliminary study of veterans with SUDs and co-occurring mental health problems treated in a specialized day treatment program has suggested positive effects of clinical hypnosis on abstinence, self-esteem, anger, and impulsivity.\textsuperscript{29} However, conclusive evidence is lacking for its use in addiction, calling for further research in this area. Although hypnosis is considered overall safe, research on its safety is limited. Clinicians should first assess the patient for the appropriateness of this treatment before recommending or applying hypnosis as a therapeutic modality.\textsuperscript{30}

**Music Therapy**

Music therapy is another complementary approach that many people find relaxing and enjoyable; however, with only limited research evidence available, there is no consensus regarding its efficacy as an adjunctive treatment for SUDs.\textsuperscript{31}

**Biologically-Based Therapies**

Note: Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Biologically-based therapies include the use of herbs, special macronutrient diets, megadoses of vitamins or minerals, and other nutritional supplements. Overall, there is only very limited research, often of poor methodological quality, evaluating effects of biological therapies. Many patients may show interest in biological therapies as “swallowing a pill” is often easier (especially when believed it is effective) than engaging in, for example, a behavioral treatment. Although many biological therapies appear safe and may be helpful (e.g., St John’s wort, milk thistle), others may exert serious, even life-threatening, adverse effects (e.g., ibogaine, some Chinese herbal remedies, and kratom) or can lead to addiction (kratom, marijuana).\textsuperscript{32} Clinicians should exercise caution and appraise the evidence and safety profile of a given biologically-based therapy before approving it for their patients.
Therapies Supported by Evidence

- **Vitamin B₁ (thiamine)** deficiency is associated with alcohol dependence; administration of thiamine during alcohol withdrawal and prescribing it long-term in alcohol dependent patients is safe and constitutes “standard of care” in alcohol dependence.\(^{33,34}\)

Therapies with Insufficient or Inconclusive Evidence on Efficacy, but Considered Relatively Safe when Used Appropriately

- Early studies have suggested that **5-Hydroxytryptophan (5-HTP)** may lessen alcohol withdrawal symptoms; however, more evidence is needed to confirm these findings, and this supplement should be avoided in patients with certain conditions.\(^{35}\)
- Limited research suggests that **milk thistle** may be helpful for the patients with alcoholic liver disease.\(^{36,37}\)
- In a small randomized trial with high attrition rate, **kudzu root extract** did not affect alcohol craving or drinking in people in an SUD treatment program;\(^{38}\) however, other preliminary research suggests decreased alcohol cravings.\(^{39}\)

Therapies with Inconclusive Evidence on Efficacy, and Which May Cause Adverse Effects

- Evidence on kratom, ibogaine, Chinese herbal remedies (*panax ginseng*; *panax quinquefolium*; *corydalis yanhusuo*) and Heantos for the treatment of opioid addiction is insufficient, and some of these compounds may produce severe adverse events and have a potential for abuse.\(^{32,40}\)
- One review, focused on Chinese medicine (CM) treatments (*Shenfu Tuodu, Fukang Pian, and Shifu Sheng*), concluded that there is not enough methodologically sound evidence to draw any conclusions on the efficacy of CM in treating heroin addiction.\(^{41}\) In addition, “there have been reports of Chinese herbal products being contaminated with drugs, toxins, or heavy metals, or not containing the listed ingredients.”\(^{18}\) Some of the herbs used in CM can interact with other medications, causing serious side effects, or they can be unsafe for people with certain medical conditions.\(^{18}\)

Overall, there is limited research related to the use of complementary and integrative therapies for addiction, with the exception of mindfulness meditation, which has been shown to be efficacious for the treatment of addiction. Hypnotherapy, massage, acupuncture, various supplements, and other approaches have shown some promise, but there is a need for more research.

**Back to David: Personal Health Plan**

**Name:** David

**Meaning, Aspiration, Purpose (MAP):**
To reconnect with my family and what brings me a sense of purpose, to receive help for my alcohol and drug use and insomnia, to stop smoking, and to learn how to deal with daily stress.
My Goals:
- Abstain from alcohol, drug, and tobacco use.
- Improve sleep, handle nightmares.
- Get in better physical health.
- Reconnect with family, and connect with old friends
- Learn strategies to cope in a healthy way with stress and transition to civilian life.
- Regain a sense of purpose.

Strengths (what’s already going well)/Challenges:
Strengths
- I’m motivated by having a sense of purpose and responsibility.
- Hiking in the woods is something I do to help clear my mind when I have a lot on my mind.

Challenges
- I lost the sense of camaraderie and freedom I had in college and before having a family.
- Nightmares keep me up at night and cause me stress.
- I’m overwhelmed by stress, family life, and used substances to cope.

My Plan for Skill Building and Support
Mindful Awareness:
- Begin practicing mindfulness meditation at home. Let thoughts of the past or future fall away, and focus attention on the present moment. Allow awareness to rest on breathing—not controlling breathing, but just noticing each breath in and each breath out. When the mind drifts away from noticing the breath, just gently guide it back to simply noticing breathing. Notice the sensation of air coming in and going out of the nostrils during each inhale and exhale; or notice the chest or belly rising and falling. Allow your awareness to rest on the breath. Try to practice for at least 2 minutes each day.
- When there is an urge to drink, smoke, or use drugs, take a couple minutes to pause and gently notice the thoughts, emotions, sensations, or actions that are happening right now. This process can help bring mindful awareness to possible triggers to use substances. Actively working toward developing mindful awareness of what is happening within me and around me in the present moment will help me progress toward my goals.

Areas of Self-Care:
Physical Activity
- Exercise can reduce stress and improve mental health, sleep, and overall physical health. Start by walking daily, and consider calling local gyms to identify one to join. Start a minimal- to moderate-intensity exercise program at home or at a gym to help with stress reduction and addiction recovery.

Surroundings
- Take time to consider surroundings both at home and at work. Become aware of my surroundings to help identify sources of security or stress and ask if it is something I would like to change. Work with a counselor to address stressors and how to manage them.
Personal Development
- Assess the amount of uplifting, nourishing, and rejuvenating activities in my life, compared to the depleting activities, which drain my energy. Identify whether there is an adequate balance of self-care in my daily life. Begin by exploring online job search engines to identify jobs that may bring fulfillment.

Nutrition
- People who excessively drink alcohol often develop a vitamin B1 (thiamine) deficiency. Start daily thiamine supplements, as prescribed by my clinician. Well-balanced diet will promote health in general and may also aid recovery.

Recharge
- Sleep, typically 7-9 hours per night, is essential to improving stress coping, energy level, and restoration. Take some time before sleep to meditate. Work with a counselor to address nightmares and other symptoms that prevent restorative, healthy sleep.

Family, Friends, and Co-Workers
- Connect with a counselor to address marital and family relationship difficulties, and seek out support groups. Connect with a recovery coach to help support ongoing recovery goals. Reach out to friends who have returned from active duty and other people I have positively connected with in the past.

Spirit and Soul
- Add hiking in the woods to my weekly routine to nurture my connection to nature, and provide inner nourishment.

Mind and Emotions
- Start by practicing some mindfulness of breath exercises. Talk to a counselor to learn additional strategies for relaxation, coping, and stress management.

Professional Care: Conventional and Complementary
Prevention/Screening
Up-to-date

Treatment (e.g., evidence-based psychological treatments, medications, complementary and integrative approaches, supplements)
- Substance use disorder and mental health counseling
- Patient education about addiction, PTSD, and sleep hygiene
- Cognitive Behavioral Therapy for sleep problems
- Marital/family therapy
- Recovery coach to support ongoing recovery goals
- Medications: nicotine replacement therapy for nicotine use disorder; thiamine 100 mg daily due to alcohol use disorder; prazosin at bedtime for PTSD-related nightmares and sleep problems
Skill building and education

- Mindfulness meditation
- Nutrition
- Sleep hygiene
- Healthy exercise routine

Referrals/Consults

- Substance use disorder and mental health specialty provider to help address substance use, PTSD, and sleep problems. Oftentimes addiction and substance use in general, and PTSD or other mental health symptoms are closely linked.
- Start attending 12-step groups such as Alcoholics Anonymous and Narcotics Anonymous, which have a spiritual orientation, and/or SMART Recovery, which is not spiritually focused. These mutual self-help groups are free, anonymous, and provide support to those who are in SUD and addiction recovery.

Alcoholics Anonymous
Narcotics Anonymous
SMART Recovery

Community Resources

- Alcoholics Anonymous
- Narcotics Anonymous
- Pills Anonymous
- SMART Recovery

My Support Team

- Primary care clinician
- Substance use disorder and mental health specialty clinicians
- Recovery coach
- Mindfulness meditation group
- Wife
- Daughter
- Andy, a friend

Next Steps

- Start walking daily
- Schedule an appointment with a substance use disorder and mental health specialty clinician
- Schedule an appointment with a recovery coach
- Consider the above suggestions to see what resonates most
- Follow up within the next 2 months to check on your progress.
Please Note: This plan is for personal use and does not comprise a complete medical or pharmacological record and does not replace your medical record.

Follow-Up with David
Through the completion of his Personal Health Inventory and with the clinician’s guidance, David began to have a better understanding of how much the difficulty in transitioning from military to civilian status has been impacting his life. He realized how much his comrades had meant to him and how lonely and disorganized his life has felt to him without the camaraderie and structure the Army provided. He became aware that his drinking and drug use were the means to cope not only with nightmares but also with the transition to civilian life in general. He reflected on his attempts to stop drinking and using opioid medications, and noted that it has truly been difficult for him to stop by himself and that he needs help. He decided to start treatment to assist with quitting his substance use, especially after considering the negative impact alcohol and drug use has had on his relationships and health. He also identified physical activity as something he would like to resume on a regular basis.

David began making changes in his daily life by going for a short walk every morning before work. He started taking thiamine daily, as prescribed by his doctor due to his alcohol use disorder. He scheduled an appointment with a dually-credentialed addiction and mental health counselor who conducted a detailed biopsychosocial assessment of David’s mental health and substance use related issues. He talked with his counselor about his history of extensive physical abuse as a child. With David’s input, and due to the concerns about active PTSD and the potential for alcohol and opioid withdrawal after ceasing substance use, the counselor connected David with a residential treatment program to help address his alcohol and drug use disorders, and mental health problems (PTSD, sleep trouble). They agreed that, unless otherwise advised by his other clinicians, after residential treatment, David would resume weekly outpatient therapy sessions with the counselor to continue his care on a long-term basis and get connected with a recovery coach. The counselor also encouraged David to regularly attend 12-step meetings for peer support; engage his wife, if she is agreeable, in the outpatient treatment; and consider family therapy.

During residential treatment, David completed medically-managed alcohol withdrawal, which required a low-dose, symptom-triggered benzodiazepine therapy for two days. He had some difficulties with increased nightmares after his detoxification and was started on prazosin at bedtime, which decreased the frequency and severity of nightmares and improved his sleep. David stayed in residential treatment for eight weeks, receiving intensive psychotherapy for SUDs and PTSD, and learning healthy coping skills.

Since the detoxification and residential treatment, David has transitioned to outpatient counseling to continue addressing his substance use and mental health disorders, has attended 12-step support groups several times per week, and has remained alcohol and drug free. He also has also committed to a daily exercise routine and has been working with a recovery coach who can assist him with “staying on track” with recovery milestones.
David is still smoking but cut down the number of cigarettes he smokes per day and plans to quit in the coming weeks when he feels ready. David and his wife have started talking about the challenges they face and how they can overcome them; they will have their first appointment for family therapy in two weeks. He has made a conscious effort to spend some time every day with his daughter, and he has started to search online for employment opportunities that may suit his needs better.

David recently connected with a social networking website and came across an old friend, Andy, who is also in recovery. They have started regular communication by phone and online, and plan to get together in the coming months as Andy lives in a neighboring state. David has also started meditating for a few minutes each day, especially when he feels stressed or has an urge to drink or use; he has found meditation helpful.

**Resources**

**Resources For Patients**

- SUD and Addiction
  - Rethinking Drinking: Alcohol and Your Health
  - U.S. National Library of Medicine-Medline Plus: Alcoholism and Alcohol Abuse
  - U.S. National Library of Medicine-Medline Plus: Drug Abuse
  - VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders—Patient Guide
  - Department of Veterans Affairs Tobacco and Health: How to Quit
- Community-Based Recovery-Oriented Resources
  - Alcoholics Anonymous
  - Narcotics Anonymous
  - Pills Anonymous
  - Crystal Meth Anonymous
  - SMART Recovery
- Treatment Resources
  - Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Resource Locator
- Wellness Resources
  - Operation Live Well

**Resources For Clinicians (Education, Programs, Guidelines, Toolkits)**

**Alcohol and Drug Use and Misuse Related Resources**

- Guidelines and Other Resources
  - National Institute on Alcohol Abuse and Alcoholism (NIAAA). Alcohol Screening and Brief Intervention for Youth: A Practitioner’s Guide. 2011
  - National Institute on Drug Abuse (NIDA). Other Resources
- U.S. Preventive Services Task Force. Unhealthy Alcohol Use in Adolescents and Adults: Screening and Behavioral Counseling Interventions, 2018
- U.S. Preventive Services Task Force. Illicit Drug Use, Including Nonmedical Use of Prescription Drugs: Screening, Draft Recommendation Statement
- VA-DoD Clinical Practice Guidelines for the Management of Substance Use Disorders (2015)

- Toolkits
  - Community Provider Toolkit
  - NIDA Clinical Toolbox
  - Opioid Overdose Prevention Toolkit
  - Department of Veterans Affairs: Self-Help Toolkit

- Educational Resources
  - Motivational Interviewing
    - Motivational Interviewing Network of Trainers (MINT)
    - SAMHSA-HRSA Center for Integrated Health Solutions–Motivational Interviewing
  - Buprenorphine waiver and other training
  - MIRECC Educational Products

- Professional Organizations
  - American Society of Addiction Medicine
  - Association for Addiction Professionals
  - Center of Alcohol Studies
  - Partnership to End Addiction
  - National Clearinghouse for Alcohol and Drug Information:
    - National Institute on Alcohol Abuse and Alcoholism (NIAAA)
    - National Institute on Drug Abuse (NIDA)
    - Substance Abuse and Mental Health Services Administration

- Treatment Resource Locator
  - Treatment Resources Locator (SAMHSA)

Nicotine Use Disorder Related Resources
- UW Center for Tobacco Research and Intervention
- Department of Veterans Affairs Tobacco and Health

Integrative Health Tools
- Substance Use Disorders
Substance Use Disorders: Complementary and Integrative Health Approaches
Recovery-Oriented Mutual Self-Help Groups
Reducing Relapse Risk
Nicotine Use Disorders

Author(s)
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References


