Challenging Addiction Treatment: The Intersection of Policy, Practice, & Science

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Editor's Note: *Anjali Talcherkar authored this op-ed while completing the Division on Addiction's Summer Research Mentorship. Anjali is working on a PhD in Mind Body Medicine and Integrative Mental Health from Saybrook University. You can learn more about her here. For more on Anjali Talcherkar's story, look for her soon-to-be-published book.*

Every year, about 27 million people worldwide misuse illicit drugs in a manner that puts them at risk for adverse health problems and even death. Too often we hear reports of famous people who suffer and die from substance misuse. On the local level, addiction can rip apart communities and families. As a *recovered* individual, and as a clinician and researcher in the field of addiction, I've studied these issues and witnessed the clinical gaps. But more tellingly, I've lived them. My personal journey transcending addiction has led me to a greater understanding of this important public health problem and the immediate need for complementary and alternative solutions.

Etiology of Addiction: An Entangled Web

E.M. Jellinek advanced the disease model of alcoholism during the 1960's. The disease model bestows great importance on biological and physiological causes. Essentially, alcohol and other psychoactive drugs change brain chemistry by "hijacking" the reward-pleasure pathways that normally reinforce us for doing things that are adaptive for our species. Over time, and with certain types of chronic substance use, we need more and more of certain drugs or activities that stimulate the pleasure circuitry to achieve the same subject effects we could obtain previously with a lower dose. As a result of this neuroadaptation, users continue to use drugs to prevent the painful experience of withdrawal despite negative consequences.

Although Jellinek does acknowledge spiritual, mental and physical decline within his disease model research, it was not given the emphasis needed. With this in mind, the biopsychosocial model highlights this importance, making it key in healthcare and how we view mental disorders in general. Moreover, practitioners like myself realize the limitations of an incomplete model to understanding addiction. Newer perspectives, like the biopsychosocial model, build upon the disease model by emphasizing psychological and social explanations alongside biology.

To illuminate this perspective, I will share part of my personal journey: During early recovery, I was advised to change my "playmates and playground" if I wanted to beat addiction. After all, research shows that we are a bi-product of our external setting, harmful or helpful. Johann Hari puts it this way in his book, *Chasing the Scream:* "Addiction is an adaptation; it's not you. It's your cage." Likewise, the Complex Adaptive Systems (CAS) approach emphasizes that individual agents act not within a vacuum but within the given conditions of a larger system.

The biopsychosocial model proposes that the complexities of addiction emanate from neurobiological processes and from an environment that perpetuates the addictive pattern. Networks of friends who use drugs together can create a culture conducive to either continued use or recovery. As I got sober and involved myself in healthy activities, my old drug-buddy circle withered away. Members of 12-step programs such Alcoholics Anonymous strongly suggest avoiding people who drink/use drugs, even socially, during early recovery; emphasis is placed on immersing oneself in the center of the "sober herd." Contrary to dogmatic AA

belief, by also interacting with people not in the the fellowship, I was able to restructure my identity and engage in pursuits that promoted purpose and passion, which served as a healthy replacement for the former addict-oriented lifestyle. Kellogg (1993) calls this *identity reversion*, or dropping the label *addict* and returning to a true identity that had been placed on hold during the active addiction (p. 236).

Since the environment and social networks influence substance use, treatment must include a focus on the user's community. Acute care might involve a stay at an inpatient treatment center, but after-care must address environmental triggers to a potential relapse. It's heartbreaking to witness clients get healthy during an inpatient stay only to relapse once discharged back into their previous environment due to lack of support during the critical re-integration phase. Often, individuals violate probation, commit crimes, and end up in more adverse situations. I was no exception: A relapse in 2007 led to a DUI felony, which cost me four months of house arrest and subsequent jail time. On a broader note, we cannot simply incarcerate our way out of this massive addiction crisis. The current opioid epidemic is a symptom indicating the urgency of this overarching issue.

Opioid Epidemic in the United States

During 2010, I lost my husband to a heroin overdose so the opioid epidemic is no benign matter to me. During 2014, for example, 10.3 million people reported abusing prescription opioids. Opioid use and misuse is not the result of a singular cause. Health epidemics are "natural phenomena" from a CAS perspective. Events that trigger an epidemic, also known "tipping points," are best understood within the *Power of Context* – local conditions, demographical factors, or small incidents in a community that spark an epidemic. Even more troubling, the rate of death from prescription-opioid overdose has nearly quadrupled since 2000.

On a more personal note, during 2008, I witnessed the morphine overdose and eventual death of a friend. I was shocked when an EMT minimized the scene as "just another daily occurrence" in the city of Los Angeles. According to the *New England Journal of Medicine*, between 2002 and 2012, emergency department visits involving misuse or abuse of prescription opioids have increased over 100%, and corresponding admissions to substance-abuse treatment programs more than quadrupled. The need for effective, long-term solutions is indisputable.

Federal, State, and Local Efforts to Address the Addiction Epidemic

At the federal level, the White House proposed a 2017 budget to congress that will include an unprecedented $1.1 billion in new funding for health care services to combat the addiction crisis; the Senate approved the Comprehensive Addiction and Recovery Act (CARA) in a near-unanimous vote on July 13th, 2016. CARA authorizes an abundance of grant programs to help communities fight addiction with cutting-edge prevention treatment programs.

State lawmakers will still need to fund CARA to deliver on its promise. Considering that addiction is a public health problem, and because addiction presents itself as a mental health issue, my fellow clinicians and I can testify to the fact that affected individuals often seek help at umbrella agencies before being referred to an appropriate treatment program. Sadly, this often entails being placed on lengthy waitlists. In addition, much of CARA's focus is directed toward medication-assisted treatment (MAT) given it is the evidence-based standard of care, however, this type of allocation doesn't leave much fiscal support for alternative (non-medication assisted) treatments.

To respond to this, at the local level, nonprofit organizations are rallying for funding to implement low-cost programs grounded in evidence-based research. For example, The *WINGS* Project (Well Being, Inner Peace, Non-Violence & Success), as taught by the nonprofit International Association of Human Values, includes instruction on breathing techniques and other practices including gentle stretches (yoga postures), cognitive and behavioral skills, and stress reduction education. The unique promise of this program in treating substance use disorders lies in its ability to address both body and mind by engendering deep relaxation, mental clarity, and other tools for sobriety maintenance.

The *WINGS* Project is a low-cost program, costing, on average, $400/participant. If integrated into inpatient/outpatient treatment, this program could potentially help reduce the "revolving door" syndrome afflicting treatment centers by teaching relapse prevention tools, and it requires no additional training. Once learned, the breathing practices taught in *WINGS* can be utilized at home recurrently. I began incorporating the breathing practice taught in this program in early recovery from drug addiction four years ago. I continue to practice it today, in conjunction with the 12-Steps, and have managed to stay clean and sober the entire time– something that was impossible prior to this miracle combination. Furthermore, research shows the power of this intervention for the

treatment of alcoholism. Not only did this practice expedite my detoxification process, it enabled me to wean off antidepressants and reach a truly sober state of mind and body.

Complementary & Alternative Medicine (CAM)

From a CAS perspective, addiction treatment is an amalgamation of moving parts interacting and coexisting within a complex process. Complementary treatments recognize and respond to the inherently interdependent, unpredictable, and non-linear nature of these moving parts. One emerging innovative treatment approach is the use of Complementary & Alternative Medicine (CAM). Demand for CAM continues to grow in the general public, despite the fact that it is usually not reimbursed by third-party payers.

CAM reimbursement is limited due to the lack of research about its clinical effectiveness, even though robust anecdotal evidence exists. As a researcher, I can attest to the difficulty in obtaining highly competitive NIH grants, so my colleagues and I are forced to get creative in securing funding, seeking out elusive alternative sources like private donors or corporate sponsorships. Nevertheless, CAM interventions, including yoga and meditation, are finding their way into treatment. One could say, the "protocol" proof is in the pudding. As a nationally certified yoga instructor, I've observed a growing number of individuals in recovery attending my yoga classes for the positive transformative effects as well as rehabilitation centers all over the globe embracing these naturally-powerful therapeutic tools.

Health Services Research (HSR) Research

Health Services Research (HSR) enables healthcare systems to effectively integrate CAM modalities that are trending toward increased societal acceptance and utilization. The Affordable Care Act has established the Institute for Clinical Effectiveness to advocate for research tied to the most efficient methods of healthcare delivery. The adaptability and flexibility central to CAS both reveals the relevance of the data gathered by the Institute and identifies changes necessary for better future outcomes. Health Services Research captures the multifaceted nature of CAM, especially with regard to the patient–practitioner relationship. CAM researchers realize the need for outcome measures that account for multiple factors, such as the philosophy of the healing tradition, the patient–practitioner relationship, and the CAM techniques used for healing.

Addiction is a major issue, best understood by examining the social environment *in conjunction* with the physiological and psychological elements of individual pathology.

While the call to action is loud and clear, the solution to the U.S. addiction epidemic is still a work in progress. A Complex Adaptive Systems approach can provide a pathway, at the intersection of policy, practice, and science, to a recovered society. One small step for man, one giant leap for CAM-kind.

— Anjali Talcherkar

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