

IN-PRISON SUBSTANCE MISUSE TREATMENT PRINCIPLES AND MODALITIES

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Terminologies on Substance Misuse

- Recreational use, social use, experimental use, risky use, misuse, abuse, excessive use, dependence, and addiction.
- How to define the threshold of substance misuse/abuse/addiction?
 - Results in adverse social and professional consequences
 - Failure to meet one's obligations, legal problems, or conflicts with others
 - Unable to carry out normal daily routine
 - Continue to use in face of mounting social/personal dysfunctions.

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Difficulty in Defining Substance Misuse: Recreational, Abuse, and Addiction

- Recreational or social use
 - Still functional and cause no problems to oneself or people around him/her.
- Abuse
 - Chronic use despite harmful consequences
- Addiction
 - physiologic and behavioral symptoms such as cravings for the substance, withdrawal symptoms if stop using; need increased amounts to calm down, and structure one's daily life around acquiring/using substance.

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Medical Definition by DSM

- *The Diagnostic and Statistical Manual of Mental Disorders (DSM-5, by American Psychiatric Association)* defines substance abuse by at least 1 of the following symptoms occurs during a 1-year period:
 - Repeated failure to fulfill obligations, which might result in missing work or school, suspension or dismissal from school or work, or child neglect.
 - Using substances under dangerous conditions (e.g., driving or operating machinery).
 - Arrests or other legal problems connected to substance use.
 - Ongoing substance use regardless of negative consequences.

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Substance Misuse Is a Global Problem

- Widespread in US and Western countries
- Spreading in developing countries
 - Particularly growing economies
 - Opium poppy production countries despite poverty
- Understand the causes, appreciate the complexity
 - inequality, social tensions, conflicts
 - growing tolerance towards deviant behavior? Dealing with deviance in a pluralistic society-punk culture, rebellion...

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No Easy Solutions

- Don't look to US or Western world for easy solutions
- We are all trying to find good solutions
- Current US crisis in opioid overdose

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Criminal Justice as a Solution

- The Control Regime
 - Led by US, Russia, China
 - UNGASS 2016 and departure of the control regime
 - Conflicting message inside US
- Harm Reduction Regime

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Drawbacks of Justice System as a Solution

- Substance misuse is a complex problem
 - multitude of problems—physiological, psychological, and social—none of which have easy solutions.
 - Complex problems require complex and flexible response
 - Prison system is rigid and inflexible
 - Unfair to ask criminal justice system --primary role is to enforce the law and penalize the law breakers.
 - Treating substance misuse disorder requires a different mindset and response setup, one that sometimes does not sync well with the justice system.

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Benefits of Prison as a Treatment Solution

- Many substance misusers wind up in prison
- Coercive nature of prison environment –making treatment services delivery effectively and efficiently, often with little or no resistance
- Quite different in the community
- Addiction assessment and treatment should begin during incarceration, and prison-based treatment is most effective when aftercare services are planned and delivered upon release.

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Prison as Public Health Frontline

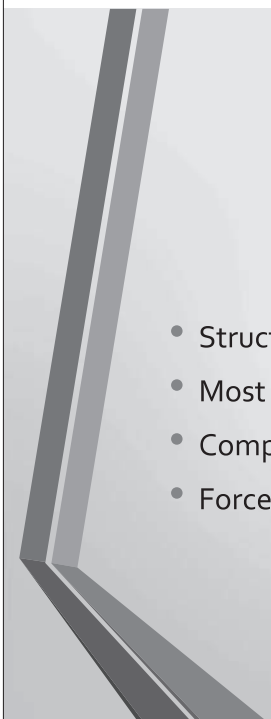
- Prison environment is excellent for screening and treating substance abusers for infectious diseases : HIV/AIDS, hepatitis B and C, and tuberculosis because:
 - poor hygiene due to living conditions
 - Limited access to public health services
 - Risky if not careful in a prison environment because of crowded environment

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GUIDING PRINCIPLES FOR IN-PRISON TREATMENT

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1. Prison Enables Effective Delivery of Treatment Services

- Structured and restrictive environment
- Most substance misusers open to treatment services while incarcerated
- Compulsory or coerced treatment just as effective as voluntary treatment
- Forced introduction to recovery

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2. Chronic Drug Use Causes Brain Damage

- Disruption of nutrients needed by brain tissue; Direct damage, injury, and death of brain cells, including neurotransmitter receptors ; Alterations to brain chemical concentrations, including neurotransmitters and hormones; Deprivation of oxygen to brain tissue
- Permanent or Transient Damage. Some damage may be possible to reverse—supplying missing nutrients that promote reestablishment of chemical pathways in the brain. Early-stage damage can be repaired; but damages due to extensive use is difficult to recover.
- Stimulants act on dopamine and its receptors in the brain, causing anhedonia (diminished ability to feel pleasure; marijuana—psychosis; hallucinogens—persistent perception disorder (Snow, Flashbacks, Echoes, Visual distortion); opioid suppresses breathing decreasing blood oxygen to the brain, may cause death or coma. Long-term use of opioid leads to hypoxia—slow developing brain damage due to brain oxygen deprivation.

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3. No Silver Bullets or Simple Solutions, So Expect Relapses, Many Times

- The idea of “curing” addiction through one or two spells of treatment is simply unrealistic
- Addiction has no cure and brain damages are hard to recover.
- Consider multiple relapses and modest goals for long-term reduction in use.
- To make things worse, substance abusers often have multiple other problems, or comorbidities, such as medical, psychological, social, vocational troubles.
- Early intervention can reduce lasting damage to the brain and improve chances of recovery.

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4. Risk/Needs Assessment and Adjust Treatment Accordingly

- Many substance misusers have criminal records, thus at risk of reoffending
- Prior to treatment, risk assessment is important to identify (1) risk of conduct disorder and reoffending, and (2)) treatment needs and criminogenic needs. *More on risk/needs assessment later*
- Treatment plans may require a combination of treatment options, for instance, medication plus counseling or psychotherapy. Other services inside the prison may also be added to the treatment plan, such as drug education, peer support groups, or self-help groups.

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5. Aftercare Is Critical for In-Prison Treatment Activities

- Secession and abstinence easy to achieve inside prison, but difficult to maintain treatment effects once released.
- Research has consistently shown that the length of stay in treatment programs is directly related to the overall success.
- Furthermore, taking the long-term perspective also means that relapses will occur to many of these inmates, and multiple episodes of treatment thus become a normal part of their recovery process.
- Many justice-involved substance misusers will return to prison and start in-prison treatment program again, and again. Important to recognize substance misuse as a form of chronic illness that requires not only in-prison treatment but also aftercare programs after release.
- Retention in aftercare is key to treatment success. Without the prison structure, alternative strategies or incentives need to be developed to keep these substance misusers in the treatment program.

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Pharmacological Treatment Approaches

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FDA Approved Medications for Treating Addictions

- Tobacco: nicotine replacement, bupropion, varenicline (reduces cravings/decreases pleasurable effects)
- Alcohol: Chlordiazepoxide (Librium—benzodiazepine class sedative), diazepam, oxazepam, disulfiram, acamprosate, naltrexone
- Opioids – agonists: methadone, buprenorphine; antagonists: naltrexone
- Stimulants (methamphetamine/cocaine): none
- Barbiturates (benzodiazepine, carisoprodol (soma): none
- Marijuana: none
- Other Addictions (gambling, pornography, shopping): none

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Limited Pharmacotherapies for Substance Misuse Treatment

- Only established protocols for opioid use
- Why (compared to other common diseases)?
 - Complex problem?
 - Limited funding affecting certain social class?

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Opioid Agonists

- Methadone and buprenorphine are the only two drugs approved by the FDA for clinical use.
- Methadone, a synthetic opioid agonist for the purpose of substitution, has been around for decades.
 - provide euphoria similar to heroin; reduce withdrawal symptoms and reduce craving for illicit opioid drugs.
 - Also act to block the effects of illicit opioids.
 - Taken orally on a daily basis; tightly controlled.
- Buprenorphine, also a synthetic opioid but only a partial agonist
 - Helps reduce cravings and withdrawal symptoms, but does not produce the euphoria and sedation similar to heroin
 - Less risk of respiratory depression or overdose than methadone; taken orally, can be at doctor's office
 - Oftentimes buprenorphine is combined with the antagonist naltrexone, a formulation called Suboxone. An implant version in the form of small rods are available, effective for four to six months.

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Opioid Antagonists

- Two common opioid antagonists: naltrexone and naloxone.
- Naloxone (or Narcan) is a fast acting but short-term opioid blocker, and used primarily as an antidote for overdose.
- Effective immediately but also wears off fast.
- Naltrexone is a long-lasting opioid blocker.
 - It binds and blocks opioid receptors so that the drug user will not feel high
 - has been around for three decades
 - taken orally as pills and injected. The pill delivery form has a poor record of compliance. The injection formulation, called Vivitrol, can deliver the effect for up to one month. However, compared to agonists such as buprenorphine, naltrexone has a hard time to be accepted by active drug users.
- Naltrexone is most effective when the substance misusers have completed detoxification, which is ideal for use in prison and in preparation for release.
 - Research has shown that the initiation of extended release (slow release) injectable naltrexone prior to prison release can significantly reduce relapse among opioid-dependent inmates.

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Psychosocial Treatment Approaches

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Promising Psychosocial Treatment Approaches

- Unlike pharmacotherapies, psychosocial approaches are different versions of “talk” therapies
 - Through techniques of persuasion or convincing to change people’s attitudes and behaviors so that they will remain abstinent.
 - They teach people to acquire new ways of thinking and skills to handle stressful situations that may trigger substance abuse.
- Research has shown that overall, psychosocial treatment strategies are effective, particularly when used in combination with pharmacological interventions.
- Most of these psychosocial interventions are available online in public and academic websites should anyone be interested in obtaining free materials.

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Risk & Needs Assessment for In-Prison Treatment

- Criminal offenders with substance misuse problems present more challenges than their non-criminal peers:
 - Legal problems
 - Complex social/personal problems
 - Co-morbidities
- Therefore in-prison treatment needs to incorporate two key ingredients: (1) *risk of reoffending*, and (2) *criminogenic needs*.

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Risk Assessment

- Two aspects to the *risk* factor in every criminal offender with substance misuse problems
 - (1) the risk of re-offending; and
 - (2) the risk of relapse.
- “Risk” is often construed as the likelihood to re-offend; but also compounded by the offender’s likelihood of relapse into substance misuse.
- The greater the substance misuse problem the more likely the person is to re-offend regardless of other criminogenic factors.
- In the U.S. most criminal offenders are assessed to identify not only their criminal propensity but also the severity of their substance misuse.
- Treatment plans should take both factors into consideration and match the service needs of the offender. Depending on inmates’ drug use history and types of drugs abused, some may receive a combination of pharmacological interventions and psychosocial services, while others are only assigned to psychosocial programs such as education and training programs to acquire coping skills, behavioral modification, counseling, and self-help.

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Needs Assessment

- *Needs* assessment is an extension of risk assessment.
- To achieve optimal allocation of resources to those in greatest needs.
- Treatment needs often associated with criminal offenders: criminal thinking, criminal associates, impulsivity, risk taking, limited self-control, poor problem-solving skills, poor educational and employment skills, and drug and alcohol dependence.
- Most US prisons use instruments developed in house or purchased commercially. Because of the high demand, risk/needs assessment has become an industry. Similar to other established psychometric tests, correctional agencies are typically charged license fees and/or per-use fee.
- There are free options. Most of the measures in these risk/needs assessment tools are similar to one another. There are no secrets to what these items are.

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Cognitive Behavioral Therapy

- Most common. Emphasizing cognitive changes in how people perceive events or situations and what alternative activities one may use to resolve their predicaments.
- Received the most attention in evaluation. In general produced more consistent positive findings than any other psychosocial approaches such as psychodynamic therapy, psychoeducation, physical exercise and supportive interventions. There are numerous variants of CBT.
- Two main components: identify and understand events and situations that provoke negative emotive states; and learn alternative coping skills and apply these newly acquired skills to wider situations.

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Attitude Adjustment

- CBT starts with “attitude adjustment”
- Change the way criminal offenders think or perceive things.
- The philosophy behind CBT assumes that people who abuse drugs usually are aware of their predicaments but unable to navigate through life’s challenges (i.e., triggers or drug use cues) without resorting to drug-induced solutions.
 - Internal trigger events: negative physical or mental states such as not feeling well or depressed
 - Interpersonal: peer pressure or negative social encounters
 - Situational: social settings that induce stress or pressure

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Acquire New Coping Skills

- CBT-oriented activities help patients recognize these stress-inducing or high-risk situations
- Acquire thinking strategies and coping skills through **modeling** and **practicing**.
- A CBT practitioner:
 - Presents multiple scenarios (in addition to eliciting specific situations from participants) that trigger substance-using behavior, identifies problematic thoughts and response strategies in the past that led to drug use
 - Introduces different ways of thinking and problem solving strategies, frequently through role-playing and modeling.
 - CBT participants rehearse and practice these newly acquired thinking skills and²⁹ behavioral techniques.

Contingency Management

- Contingency management (CM) focuses on exploiting the principle of operant conditioning--behavior is shaped by its consequences.
- If positive behaviors are quickly reinforced through incentives, such behaviors will likely repeat themselves.
- By offering alternatives to drug use, people are believed to be able to accept non-drug incentives and avoid relapse.
- CM seeks alternatives or behavioral substitutions, mostly through incentives, to encourage or maintain desired behavioral changes and prevent relapse.
- Numerous studies have been conducted to examine the efficacy of contingency management and findings are supportive in general.

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Voucher-Based Reinforcement Therapy (VBRT)

- A treatment participant is rewarded with an incentive following a clean drug test, typically through urinalysis.
- A substance misuser receives a voucher worthy of a monetary value each time he/she is tested clean. Consecutive clean tests can increase the value of the voucher.
- For instance, the first time a clean urinalysis is worth \$1.00. The second test, the voucher will be worth \$1.50, and the third consecutive clean test will be worth \$2.00. After three clean tests, the program participant will earn a total \$4.50.
- However if the fourth test turns dirty, the voucher will be worth \$1.00, reset to its starting value. The idea is that as the voucher becomes more valuable with each successive clean test, the participant will be incentivized to stay clean,³¹ hoping to cash in for a sizable cash award at the end.

Prize-Based Procedure

- Each clean urinalysis is rewarded with a chance to win something from a bowl filled with paper tickets or slips for various prizes.
- After a negative drug test, he/she will get to draw a prize from the prize bowl. Oftentimes the ticket or slip contains nothing more than a few encouraging statements, such as "good job". The majority of the slips in the bowl contain low value prizes.
- As the participant turns in consecutive clean urine samples, he/she is afforded additional chances to draw prizes, thus increasing his/her chances of winning "big" prizes, e.g., a \$100 gift card.
- But a dirty test will reset to only one draw from the bowl.

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Motivational Interviewing (MI)

- A counseling style whereby the therapist seeks to help program participants to explore and resolve their own ambivalence towards treatment and rehabilitation.
- MI-type counseling is non-judgmental and non-confrontational.
- The counseling style places the participant at the center to take charge of his/her own life.
- The client is encouraged to set goals and explore ways to avoid their destructive lifestyle. So inmates find self-motivation to change behaviors. Typically the therapist uses open-ended questions to encourage participants to realize their agency.

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Doing MI

- MI procedures are typically brief and used in conjunction with other behaviorally oriented treatment activities.
- MI starts with an assessment of the program participant, then the therapist uses the information to stimulate discussion and self-motivation. The treatment consists of brief sessions, during which participants make a plan for change and devise strategies to maintain abstinence.
- Because MI is brief and manualized, it can be applied in settings where there are few other treatment resources. Free materials available online at the U.S. government agency (such as NIDA) websites.

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Other Common Psychosocial Interventions

- A large number of treatment modalities are variants of CBT, such as dialectical behavior therapy (DBT) and moral reconnection therapy (MRT).
- DBT focuses on learning about one's triggers that lead to negative state of mind and learning to apply different coping skills to break the sequence of events, thoughts, feelings, and behaviors that cause relapse. DBT assumes that the identification of triggers and effective coping skills can produce and reinforce desired behavior and prevent relapse.
- MRT is intended to help criminal offenders deal with anti-social thinking, helping offenders through several phases to identify and process events and environments that cause criminogenic stress, acquire and practice alternative behavioral solutions, and apply their new skills to a wide range of stressors.

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Self-Help Programs

- Widely practiced in the U.S. among substance misuse community
- Originally as Alcoholics Anonymous (AA)—a self-help style of support groups for alcoholics.
- There are AA groups practically in all corners of the U.S., where mentors are helping mentees abstain from drinking.
- There are also 12 traditions to go along with the 12 steps of changes that govern behavior of AA members. The 12-step program first emerged in the 1930s and, although there have been changes over the decades, the essential elements remain.

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The Essentials in A 12-Step Program

- admitting that one cannot control one's alcoholism, substance misuse or compulsion;
- recognizing a higher power that can give strength;
- examining past errors with the help of a sponsor (experienced member);
- making amends for these errors;
- learning to live a new life with a new code of behavior;
- helping others who suffer from the same alcoholism, substance misuses or compulsions.

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- 1. We admitted we were powerless— that our lives had become unmanageable. HONESTY
- 2. Came to believe that a Power greater than ourselves could restore us to sanity. HOPE
- 3. Made a decision to turn our will and our lives over to the care of God as we understood Him. FAITH
- 4. Made a searching and fearless moral inventory of ourselves. COURAGE
- 5. Admitted to God, to ourselves and to another human being the exact nature of our wrongs. INTEGRITY
- 6. Were entirely ready to have God remove **all** these defects of character. WILLINGNESS
- 7. Humbly asked Him to remove our shortcomings. HUMILITY
- 8. Made a list of **all** persons we had harmed and became willing to make amends to them **all**. SELFDISCIPLINE
- 9. Made direct amends to such people wherever possible, except when to do so would injure them or others. LOVE FOR OTHERS
- 10. Continued to take personal inventory and when we were wrong, promptly admitted it. PERSEVERANCE
- 11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying **only** for knowledge of His will for us and the power to carry that out. SPIRITUAL AWARENESS
- 12. Having had a spiritual awakening as the result of these Steps, we tried to carry this message to compulsive overeaters and to practice these principles in **all** our affairs. SERVICE

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CONCLUSION

- Research has shown that treatment for substance misuse disorder is effective, but there is no singular approach that works the wonder.
- Most treatment professionals advocate for a comprehensive approach that starts with risk and needs assessment, and then match treatment services with identified needs.
- Post release monitoring and surveillance are important for the treatment planning.
- Effective treatment programs for prison inmates tend to have the following characteristics:
 - (1) intensive and behavioral that aim at taking up most if not all offenders' daily schedule and providing positive reinforcement for pro-social behavior;
 - (2) focused on high risk offenders;
 - (3) matching treatment modalities and services with identified needs; and
 - (4) providing pro-social contexts to bridge offenders released from prison to outside law-³⁹ abiding lifestyles.

Take Home Point 1: *Avoid Reinventing the Wheel*

- Psychosocial interventions do not contain proprietary ingredients that, if packaged together, can somehow deliver guaranteed results. So no need to purchase any commercial training manuals or packages. Be very suspicious if someone advocates a commercial product or encourage one's agency to purchase a so-called name brand in substance misuse treatment field.
- No shortage of companies, many of them in the U.S., that are eager to sell or promote packaged programs for a fee. Many companies also try to get listed on government agency websites as a way to increase their "legitimacy".
- Free manualized treatment protocols (and assessments) can be obtained so that well-established psychosocial interventions can be implemented with little or no cost. Check U.S. government websites, such as National Institute for Drug Abuse.
- It is important to develop culturally-sensitive programs, but the theories underlying the above-mentioned treatment modalities are common across all societies, and have been tested and standardized through numerous clinical studies with different social and ethnic groups.
- More importantly, these psychosocial principles are simple enough for ordinary people to master, thus providing cost-effective treatment to peer support groups in places where there are few mental health professionals.

Take Home Point 2: Use Rigorous but Inexpensive Evaluation Strategies to Improve Treatment Programs Over Time

- Evaluation research should be a standard component in all agencies that provide substance misuse treatment services.
- Psychosocial interventions that are often culturally responsive tend to vary somewhat from place to place. Once a psychosocial intervention takes on a local flavor, it should be evaluated so that incremental improvements can be made.
- By rigorous, we do not mean expensive. RCTs are the most basic design to prove the efficacy of a treatment protocol.
- The key objective of a randomized controlled trial is to create a condition for “objective” or “non-judgmental” comparison, and prevent cherry picking.

Questions?