

The Nature of Addiction and Recovery

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Basic Substance Abuse for District Court Judges

James Finch, MD

Director of Physician Education:  
NC Governor's Institute on Substance Abuse  
Addiction Medicine Practice: Changes By Choice, PLLC  
Durham, NC

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The Nature of Addiction and Recovery

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- Models for understanding substance abuse and addiction
- Progression from use to abuse to dependence
- Abuse and addiction applied to abuse of prescription medications
- Basic elements of evidence based SA treatment
- Role and limitations of medication assisted treatment
- Elements of SA assessment and treatment matching

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Pivotal Developments in the Approach to Substance Abuse Assessment and Treatment

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Potential for effective interventions improved by **three major developments** in the field:

- Public Health "Continuum" Model
- Evidence Based Behavioral Therapies
- Neurophysiologic Research and Pharmacologic Adjuncts: Medication Assisted Therapy (MAT)

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**We Are a Drug *Using* Culture**

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- Alcohol
- Tobacco
- Caffeine
- Stimulant medications
- Sleeping pills
- Tranquilizers ("nerve pills")
- Analgesics/pain pills
- Illicit drugs

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**Prevalence of Alcohol Use**

*NIAAA National Epidemiologic Survey on Alcohol and Related Conditions*

```
graph TD; A["Any Alcohol Disorder  
17.6 million (8.5%)"] --> B["Alcohol Abuse  
9.7 million (4.7%)"]; A --> C["Alcohol Dependence  
7.9 million (3.8%)"]
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NIAAA = National Institute on Alcohol Abuse and Alcoholism.  
Source: Grant BF, et al. Arch Gen Psychiatry. 2004;61:807-815.

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**Drugs of *Abuse*: Legal and Illegal**

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- Nicotine
- Alcohol
- Marijuana and hashish
- Cocaine, amphetamines, MDMA ("ecstasy")
- Heroin, opioid analgesics (pain pills)
- Benzodiazepines, barbiturates
- Inhalants (solvents, gases, nitrous)
- Hallucinogens (LSD, mescaline, psilocybin)
- Other: Ketamine/PCP/DXM/Steroids
- NEXT?

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**US Population (12 and over) Who Have Ever Used Illicit Drugs, Cigarettes or Prescription Medications for Non-medical Purposes**

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■ Any illicit drug	45%
■ Marijuana/hashish	40%
■ Cocaine	18%
■ Heroin	2%
■ Cigarettes	65%
■ Non-Med Use of Rx Drugs	20%

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**Deaths Related to Drug Use**  
(US Centers for Disease Control and Prevention)

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■ tobacco	>430,000/year
■ alcohol	100,000/year

Overdose deaths:

■ abuse of Rx meds	>20,000/year
■ cocaine and heroin	15,000/year

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**Commonly Abused Prescription Medications**

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- **Ranking of common classes of abused prescription medications in terms of frequency and public health impact:**
- **Opioid analgesics**
  - Hydrocodone (Vicodin)
  - Oxycodone (Percocet, Oxycontin)
  - Methadone (Dolophin)
- **Benzodiazepines**
  - Alprazolam (Xanax)
  - Clonazepam (Klonopin)
- **Stimulants**
  - Amphetamine (Adderal)
  - Methylphenidate (Ritalin)

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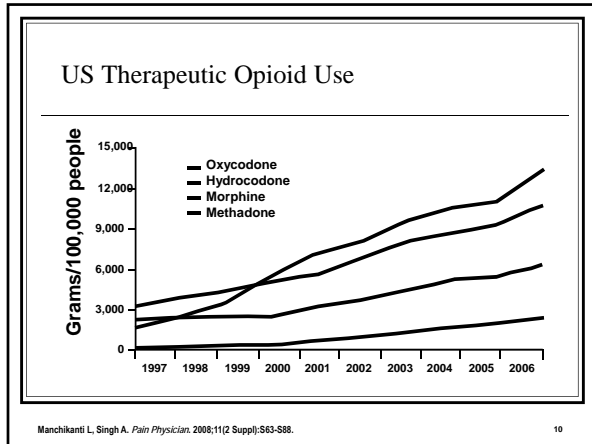
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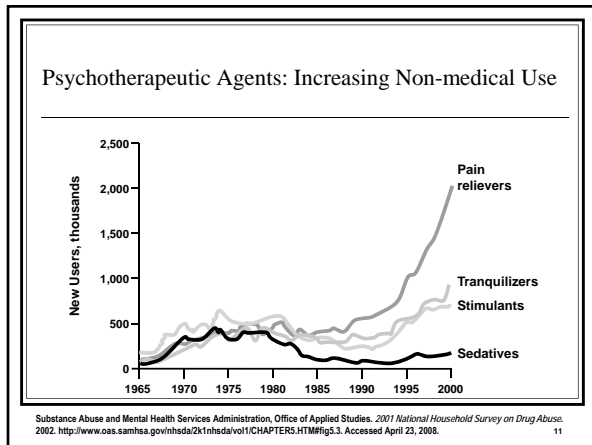
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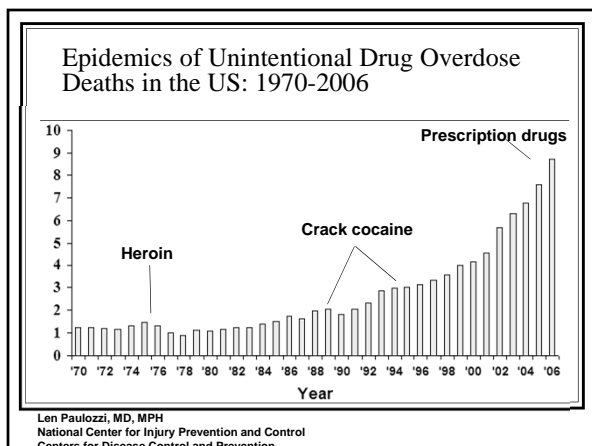
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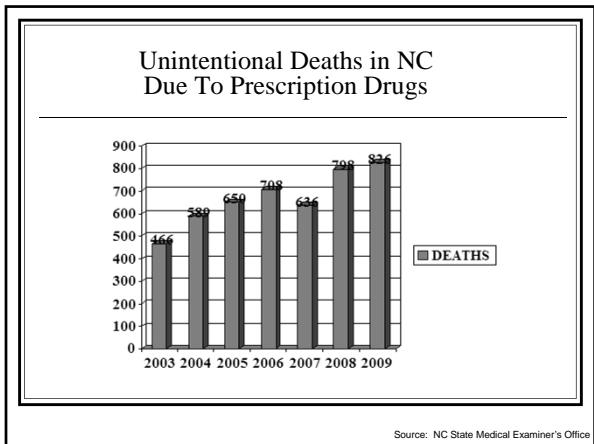
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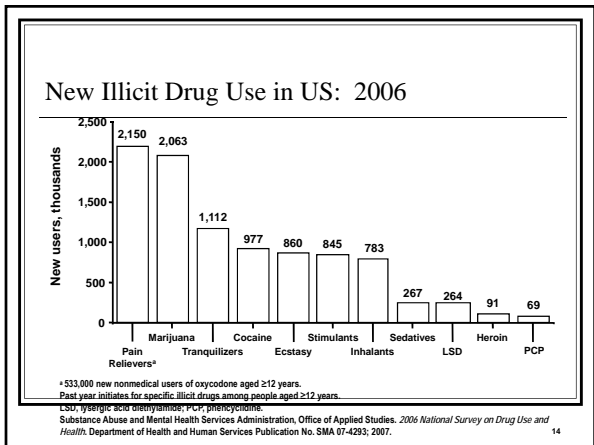
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### The Next Generation

**Increase** in recreational use of opioid analgesics between 1992 and 2002:

Age 12 to 17: **542 %**  
 Age over 18: **124%**

Prevalent nationwide but higher in rural, suburban and small urban areas.

National Center on Addiction and Sub Abuse: Columbia U., 2005.  
 Cicero TJ, et al. Pain Medicine, 2007.

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**Adolescent Prescription Medication Abuse:**

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**Sources:** 60%: Friend or relative  
 17%: Single physician  
 5%: Drug dealer  
 1%: Internet

SAMHSA: National Survey on Drug Use and Health, 2005

**Reasons for using:** Easy to get from medicine cabinet: 62%  
 Available everywhere: 52%  
 They are not illegal drugs: 51%  
 Safer to use than illegal drugs: 35%  
 Easy to get over the internet: 32%  
 Parents don't care as much if caught: 21%

NIDA: PATS Survey, Grades 7 through 12, 2005.

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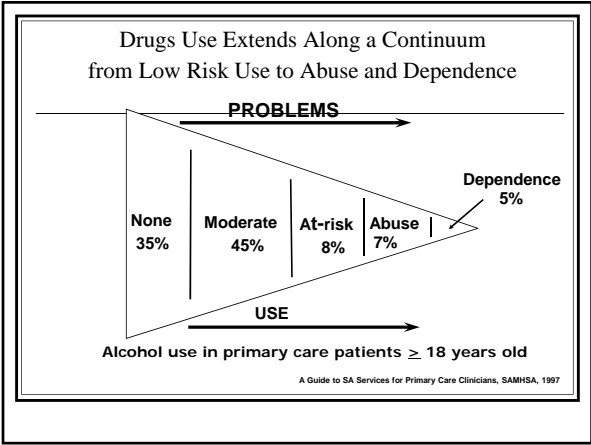
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**At-risk or problem use of alcohol or other drugs**

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- Use of the alcohol in **high-risk amounts**
  - Alcohol use at more than 14 standard drinks/wk (7/wk for women or over 65)
  - Alcohol use at more than 4 drinks/episode (more than 3/episode for women or over 65)
- Use of alcohol or other drugs in high risk situations (eg: DWI, pregnancy, medical or psychiatric contraindications)
- Any use of an **illegal** drug
- Overuse or **misuse of prescription** analgesics or tranquilizers

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**Public Health Paradigm of Prevention and Intervention for Alcohol and Other Drug Related Problems**

The primary goals are to:

1. Prevent or delay the onset of use and/or prevent the progression of high-risk or problematic use.
2. Reduce high-risk or problematic use to lower-risk levels.
3. Promote abstinence in persons who are alcohol or other drug dependent.

This presentation will focus on the last of these 3 goals although aspects will be applicable to the other two.

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**Progression Along the Continuum**

- Continuum: Use-Misuse-Abuse-Dependence
  - How does someone get from use to abuse?
  - Why some and not others?
  - Why them and not me?
- How do you go back?
- How do you prevent or intervene with the progression?
- How do you treat addiction?

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**Models for Addiction: Past and Present**

- **Moral:**  
The addict is weak or bad.  
The drug itself is evil.
- **Psychological/Sociological:**  
"Addictive personality"  
Learned behavior: Reward theory  
Family and cultural norms
- **Medical "disease":**  
Genetic predisposition  
Neuro-chemical "imbalance" or adaptation

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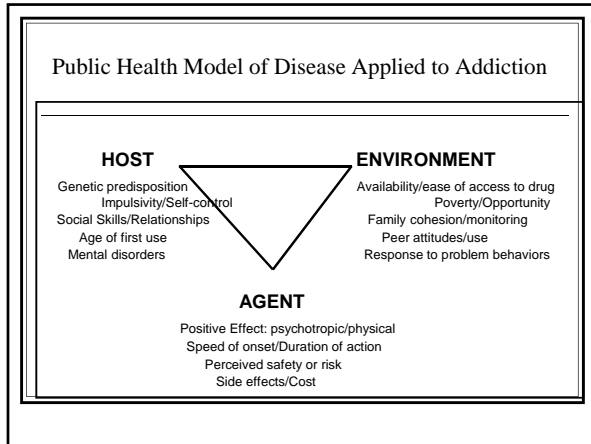
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### Host: Predisposing Factors

- Predisposition based on:
  - genetics
  - impulsivity/risk taking
  - pronounced response to drug
  - early age of first use
  
- Increased risk from co-existing conditions:
  - mood disorders
  - trauma/PTSD
  - personality disorders
  - chronic pain

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### Prevalence of Alcohol Dependence Among NESARC Respondents With Psychiatric Disorders

Index Disorder	Comorbid Alcohol Dependence	
	% (SE)	OR (95% CI)
Bipolar I disorder (12 Month) <sup>1</sup>	17.8 (1.83)	5.9 (4.6-7.7)
Bipolar I disorder (Lifetime) <sup>1</sup>	40.5 (1.78)	5.2 (4.5-6.1)
Any personality disorder (12 Month) <sup>2</sup>	10.2 (0.51)	4.0 (3.6-4.6)
Histrionic PD (12 Month) <sup>2</sup>	21.3 (1.88)	7.5 (6.0-9.4)
Antisocial PD (12 Month) <sup>2</sup>	19.2 (1.29)	7.1 (6.0-8.4)
Dependent PD (12 Month) <sup>2</sup>	19.1 (3.93)	6.1 (3.6-10.1)
Major depressive disorder (12 Month) <sup>3</sup>	8.2 (0.78)	2.4 (1.9-3.0)
Major depressive disorder (Lifetime) <sup>3</sup>	21.0 (0.78)	2.1 (1.9-2.3)
Social anxiety disorder (12 Month) <sup>4</sup>	8.6 (1.16)	2.3 (1.7-3.1)
Social anxiety disorder (Lifetime) <sup>4</sup>	27.3 (1.39)	2.7 (2.4-3.2)

1. Grant BF et al. Arch Gen Psychiatry. 2004;61:1361-1368.  
 2. Grant BF et al. Arch Gen Psychiatry. 2004;61:1361-1368.  
 3. Grant BF et al. Arch Gen Psychiatry. 2005;62:1027-1036.  
 4. Grant BF et al. J Clin Psychiatry. 2005;66:1351-1361.

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**Psychiatric Disorders and Opioid Dependence**

Disorder	Prevalence		References
Major Depression	Lifetime	38-56%; 20-50%	Havard et al, 2006; Nunes et al, 2004
	Current	16-30%; 10-20%	
		19.8% males; 31.1% females	Darke et al, 2009
Anxiety Disorders	Lifetime	13.2-24.5%	Rounsaville, 1982
PTSD	Lifetime	11-20%; 40%	Villagomez, 1995; Darke et al, 2004
Bipolar Disorder		<5%	Fudala & Woody, 2002
Psychotic disorders		<5%	Fudala & Woody, 2002
Axis II: Borderline		46%	Darke et al, 2004
Axis II: ASPD		20-50%; 72%	Fudala & Woody, 2002; Darke et al, 2004
ADHD		5.22%	Arias et al, 2008

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**Environment: Cultural and Economic Factors**

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- Availability of drugs
- Poverty/opportunity
- Family cohesion/monitoring
- Response to problem behaviors
- Availability of treatment
- Peer and family attitudes
- Cultural norms about drug use

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**Cultural Ambivalence About Alcohol and Other Drugs**

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- Source of serious morbidity and mortality

BUT

- Often socially acceptable
- Readily available
- Many heavily promoted and advertised
- Consequences tolerated by society

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### US society and opioid analgesics

Percentages of *world-wide production* of opioid analgesics that are *consumed* in the US:

- Hydrocodone 99%
- Oxycodone 83%
- Hydromorphone 57%
- Methadone 60%
- Morphine 51%
- Codeine 14%

International Narcotics Control Board: UN Pub. 2006

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### Agents: Characteristics of Drugs and Medications

- How do characteristics of certain drugs enhance or disguise their abuse potential?
- How do these characteristics interact with host and environment?
- How can characteristics of certain opioids even make them useful as treatments?

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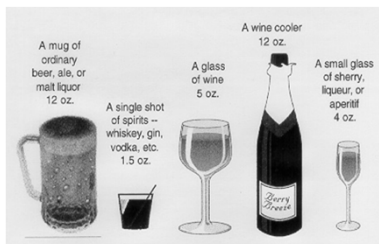
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### A "Standard Drink"



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**Cocaine: Forms and How Used**

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Coca leaves (chewed or as tea)  
2% cocaine

Coca Paste (occasionally smoked)  
20% cocaine  
typically not exported

Cocaine Hydrochloride (snorted or injected)  
90% cocaine  
traditional powder form

Cocaine Base ("crack": smoked)  
95% cocaine  
small pebble sized/easily marketable

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**Onset and Peak Effects of Stimulants  
Related to Route of Administration**

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<u>Route</u>	<u>Onset of Action</u>	<u>Peak Effect</u>
Inhalation	7-8 seconds	1-5 minutes
Intravenous	15-16 seconds	3-5 minutes
Intranasal	3 minutes	15-20 minutes
Oral	10 minutes	45-60 minutes

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**Opioid Characteristics:  
Abuse and Addiction or Treatment**

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	<b>Methadone Buprenorphine</b>	<b>Short acting opioid</b>
<b>Route</b>	Oral Sublingual	Oral, injected (IV), Intranasal (IN)
<b>Onset</b>	60 min. or more	IV, IN: seconds Oral: 15-20 min.
<b>Duration</b>	8 to 24 hrs.	2 to 4 hours
<b>Euphoria</b>	Absent	Present: moderate to pronounced

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### Addiction: Progression Along the Continuum

- Review the progression from non-problematic use to abuse and dependence:  
  
To provide a background for understanding the necessary core elements of treatment.

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### Why do people start using drugs?

- To feel good: get *“high”* or *“buzzed”* or *“altered”*
- To avoid emotional pain, relax or deal with stress: *“chill”* or *“mellow out”*
- To perform better, activate, energize or enhance: *“rev”* or *“amp up”*
- To be part of a group, socialize, conform: *“fit in”*
- Medical treatment of physical pain or psychiatric illness: *“get relief”*

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### Why do people keep using or escalate their use of drugs?

- Previous reasons with **expansion** into other domains
- **Narrowing** of behavioral alternatives/increased reliance on drug
- What’s “good” about using **seems** to outweigh what’s “not so good”
- Denying or **ignoring risk or problems** as they develop

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**Escalating Risks of Drug Use and Abuse**

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- **Risks associated with quantity/frequency/chronicity:**  
The *more and the longer* you use, the more likely you are to have problems.  
Ex: Alcohol and liver disease  
Marijuana and lung disease
- **Risks associated with acute toxicity:**  
The characteristics of the drug or how it is used mandate risk at *any level* of use.  
Ex: Cocaine and cardiac risk  
Injecting behaviors and infectious disease risk  
Drinking/drug use and trauma risk
- **Escalation of medical and psychiatric co-morbidities**

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**Particular Risks Associated with Prescription Medication Use and Abuse: Subtle**

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- Escalating use in attempt to get *relief* from untreated pain or mood disorder
- Over-reliance on meds for "*chemical coping*"
- Rationalizing problematic or high risk use because "*it's prescribed for me*"
- Even if recognize problems, may see as "*only way to deal with pain or anxiety*"
- If try to wean or stop: withdrawal, untreated pain or mood disorders are strong *triggers for relapse*

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**Progression to Abuse and Dependence: Problems**

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- Increased use of the drug and time involved with the drug
- Development of recurrent pattern of problems related to use:  
Emotional/Interpersonal/Social  
Physical/Occupational/Legal
- Continued use of the drug in spite of these problems
- Increasing guilt/shame/denial

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**Progression to Abuse and Dependence:  
Neuro-adaptation**

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- Neuro-adaptation in reward (survival) system with increasing reliance on the drug to maintain hedonic tone.
- Deterioration in pre-frontal cortical control system and transition from volitional control to compulsive, out of control use.
- Transition from pleasurable use to maintenance use and need to avoid physical withdrawal.

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**Host: Altered Brain Physiology**

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**Progression toward addiction is facilitated by:**

- *Neuro-plasticity* in host in response to repeated drug exposure:
- Alterations in neuronal structure and neurotransmitters in three critical areas of the brain:
  - limbic system
  - hippocampus
  - prefrontal cortex

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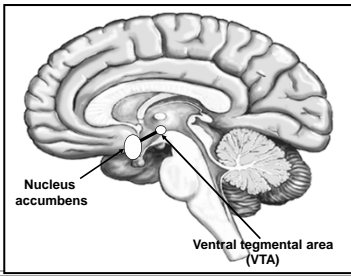
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**Brain Reward Pathways**

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- The VTA-nucleus accumbens pathway is activated by all drugs of dependence including alcohol
- This pathway is important not only in drug dependence, but also in essential physiological behaviors such as eating, drinking, sleeping, and sex

Messing R.O. In: Harrison's Principles of Internal Medicine, 2001:2557-2561.

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**Neurotransmitters and Drugs of Abuse**

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- **Dopamine**
  - mediates motivation and reinforcement
  - increased release with drug use
- **Serotonin**
  - modulates mood, motivation, appetite
  - influences rewarding effects of drugs
- **Endorphins**
  - mediates rewarding effects, relief
  - activates dopamine release
- **GABA (gamma-amino butyric acid)**
  - major inhibitory transmitter
  - enhanced by alcohol and other sedating drugs
- **Glutamate**
  - major excitatory transmitter
  - suppressed by alcohol or other sedating drugs

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**Dependence on Alcohol or Other Drugs**

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**Maladaptive pattern of use leading to clinically significant impairment or distress, manifested within a 12-month period by at least 3 of the following:**

1. Tolerance
2. Withdrawal
3. Loss of control over amount consumed
4. Preoccupation with controlling use
5. Preoccupation with related activities
6. Impairment of social, occupational, or recreational activities
7. Use is continued despite persistent problems related to use

DSM-IV-TR. American Psychiatric Association: Washington, DC; 2000.

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**“Bio-psycho-social-spiritual”  
Treatment Elements**

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- Time abstinent: re-set neuro-adaptation/restore cortical function
- Mitigate craving: MAT and behavioral interventions
- Address reasons for use and how to respond to and avoid triggers and cues
- Alternate means of coping with craving and dysphoria
- Decrease social risks: situations/settings/associates

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**Treatment Elements: continued**

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- Increase access and use of non-using behavioral alternatives
- Increase social support for sobriety/connect or reconnect
- Reinforce other sources of reward/pleasure
- Re-establish connection with spiritual or other source of meaning (god/family/community/meaningful work)

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**Treatment Alternatives to Facilitate Recovery**

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Mutual support/self-help groups  
AA, NA, Al-Anon, Smart Recovery, Women for Sobriety

Psychosocial and non-pharmacologic treatments  
Cognitive Behavioral Therapy  
Motivational Enhancement Therapy  
Contingency or Incentive Based Therapy  
Family and Couples Based Therapies

Applied in individual and/or group therapy settings

Medication assisted treatments (MAT)

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**Dimensions of Substance Use Treatment**

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- Levels of care
- Setting
- Duration
- Approach

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*Levels of Care: ASAM Placement Criteria*

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- Based on 5 dimensions
  - Biomedical conditions
  - Emotional or cognitive condition
  - Readiness to change
  - Relapse, continued problems
  - Recovery environment
- Levels of Care: 0.5-4.0
  - 0.5 Early intervention
  - I Outpatient Services
  - II Intensive Outpatient
  - III Residential/Inpatient
  - IV Med Managed Inpatient

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**Settings for Treatment Within Each Level of Care**

LOC	Examples of Setting
.5	DUI programs, EAP services, eval only, mobile
I	office practice, primary care, 2X weekly group
II.1	intensive evening program (e.g. 5X/week, 5-8 hrs/day)
II.5	day program (e.g. 5-7 X/week, 5-8 hrs/day)
III.1	halfway house
III.3	extended care facility
III.5	therapeutic community
III.7	inpatient rehabilitation center
IV	inpatient hospital detox or psych unit

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**Approaches to the Treatment of Substance Use**

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- Distinction between setting and approach
- Large number of approaches, differing in:
  - philosophy
  - conceptual understanding of addiction
  - techniques employed
- Approaches can be practiced across a variety of treatment settings for variable duration

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**Treatment of Substance Abuse: Role of MD**

Addiction Medicine physicians may have various roles in different settings and levels of care:

- Treatment of medical and/or psychiatric co-morbidities, including withdrawal management.
- Providing medication assisted treatment (MAT) with or without involvement in non-pharmacologic treatment.
- Care related to Non-pharmacologic treatment:
  - Provided directly by the MD
  - Managed or supervised by the MD
  - Supported and reinforced by MD

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**Review of Treatment Effectiveness**  
Miller et al (1995)

- Meta-analytic review of 219 studies
- Ultimately able to rank 30 treatment approaches

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**Best Performing Approaches**  
(not rank ordered)

- Motivational Interviewing
- Brief Interventions (usually motivational approach)
- Cognitive-Behavioral Treatment
- Community Reinforcement Approach (CRA)
- Contingency Management (CM)
- Behavioral Marital Therapy (BMT)
- Medication Assisted Treatments

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**Worst Performing Approaches**  
(not rank ordered)

- Educational approaches alone
- General counseling (usually disease model training)
- Psychotherapy (supportive, insight-oriented)
- Confrontational counseling
- Relaxation training alone

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**Selected Psychosocial Treatments**

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- Motivational Interviewing (MI)
- Cognitive-Behavioral Treatment (CBT)
- Community Reinforcement Approach (CRA)
- Contingency Management (CM)
- Family and Marital Therapy (BMT)
- Dialectical Behavioral Therapy (DBT)

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**Approaches in Addiction Treatment:  
Motivational Interviewing**

- A *directive, client-centered* counseling style for eliciting behavior change by helping clients to explore and resolve *ambivalence*.
- Recognizes that people make changes when:
  - They see themselves vulnerable to negative consequences and regard them as serious
  - They see the benefits of change outweighing the costs of change
- Builds upon/distinct from Trans-theoretical Stages of Change Model

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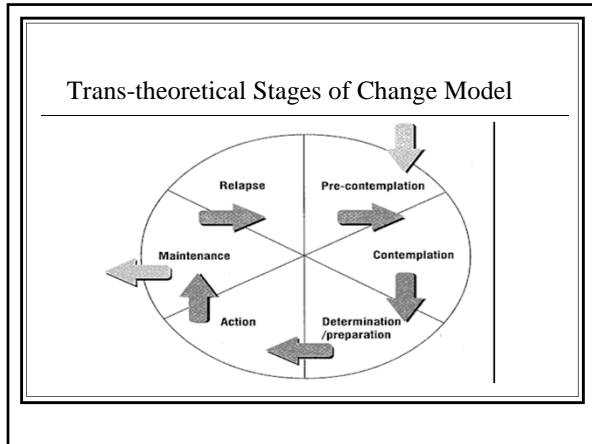
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**Stages of Change (1)**  
*(Prochaska & DiClemente's Transtheoretical Model)*

- Pre-contemplation  
Awareness of association between risk or problems related to drug use move people out of this stage
- Contemplation  
Perceived rewards of *changing* must increase and costs of changing must decrease: *resolve ambivalence*
- Preparation  
Acceptance of need for change/plan implementation

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**Stages of Change (2)**

- Action  
Most treatment is aimed at patients in this stage only: often a mismatch between readiness and plan
- Maintenance  
Requires ongoing work to sustain changes
- Termination  
Less than 30% make this stage
- (Relapse)  
Ongoing risk but doesn't mean "going back to square one"

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### Two Stages of Motivational Interviewing

- Phase 1: Building Motivation for Change
- Phase 2: Strengthening Commitment to Change

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### Change Talk

- Change talk is any *client speech that favors movement* in the direction of change
- Previously called "*self-motivational statements*"
- Change talk is by definition linked to a *particular behavior change target*

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### Preparatory Change Talk (Building Motivation)

- DESIRE to change ( I want to...would like to...wish I could...)
- ABILITY to change ( I could . . )
- REASONS to change ( If I could...then...)
- NEED to change ( I need to... have to...)

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### Implementing Change Talk

Reflects *resolution of ambivalence*:

- COMMITMENT (intention, decision, readiness)
- ACTIVATION (willing, trying, preparing)
- TAKING SPECIFIC STEPS
  - "I have decided to..."
  - "I am willing to..."
  - "I am doing this...and this..."

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### Motivational Interviewing (MI) helps to:

- Enhance intrinsic motivation for change (mobilize client's own change resources)
- Recognize the need to do something about the current or potential problem
- Resolve ambivalence and reach a decision for change
- Build commitment to change

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### Cognitive-Behavioral Therapy (CBT): Rationale

- Substance use can be seen as learned behavior
- Over time, substance use affects how people think and feel, and what they do
- By understanding this process, one can learn how to stop or change use
- New, more effective skills can replace old habits that lead to use
- Practice is essential

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**Cognitive Behavior Therapy:  
Basic Treatment Components**

- Identification of high risk situations  
    "people, places, and things"
- Development of coping skills  
    To manage risk/triggers as well as negative emotional states
- Development of new lifestyle behaviors  
    To decrease need for/role of substance use
- Development of sense of self-efficacy  
    Build on small successes in coping

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**Core Elements of CBT: Recognize/Avoid/Cope**

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- **Recognize:** triggers/cues (external/internal)
- **Anticipate/Avoid:** (situations/people/places)  
  
    *"People/Places/Things"*  
    *"Playmates/Playgrounds/Playthings"*  
    *"Play the tape to the end."*  
  
    *"It is easier to avoid temptation,  
        than to resist temptation".*

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**Cognitive Behavior Therapy:  
Basic Treatment Components (2)**

- Communication skills  
    Drink refusal skills  
    Asking for help
- Preparation for lapses  
    Process to be learned from "lapses"  
    Prevent lapse from becoming relapse  
    Identify and manage patterns of thinking that increase risk
- Dealing with relapse  
    Relapse is not a catastrophe  
    Minimize consequences

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Core Elements of CBT Applied to Substance Abuse Treatment

■ Cope: develop or reinforce skills:

- Deal with cravings/urges to use/situations
- Explore other ways to relax/deal with stress/problem solve
- Re-expand dormant behavioral options to socialize/have fun
- Connect/re-connect with sources of reward and "hedonic tone"

"Who needs life when you've got heroin." (Trainspotting)

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CBT: Editing the Patient's "Story"

The language of the story:

- Generalizations
- Distortions/deletions

Therapeutic interventions:

- Challenging "learned helplessness"
- Reinforcing the power of "yet"
- Supporting "self-efficacy"

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Support Self-Efficacy: Editing the Patient's "Story"

Listen to the language of the patient's story:

generalizations/deletions/distortions

"I always screw up" "I can't stop using" "My life is still crap"

Therapeutic interventions:

Challenging "learned helplessness"

"Really, you always screw up?"

Reinforcing the power of "yet"

"Well, yes...you haven't stopped... yet"

Supporting "self-efficacy"

"Look what you have accomplished...you can do this"

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**Contingency Management (CM)**

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- Based on operant conditioning: substance use as learned behavior
- Contrived rather than naturally occurring: uses contingencies set in place explicitly and exclusively for therapeutic purposes
- Example: Earning vouchers exchangeable for retail products contingent on negative urine toxicology results
- Example: Earning methadone take-home privileges for negative urine drug screens

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**Community Reinforcement Approach (CRA)  
Basic Treatment Components**

- Based on operant conditioning: substance use as learned behavior
- *Naturalistic*: uses contingencies already operating in the individual's natural environment to support change and abstinence (eg: giving or withholding praise for behaviors)
- Functional analysis of both healthy and substance use behaviors in terms of ability to reward/be aversive
- Refining problem-solving and goal-setting efforts for individual and/or family ( teaching positive communication, contracting skills)

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**Approaches in Addiction Treatment:  
Treatment for Significant Others**

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- Types of Family/Marital Treatment (alone or together with identified patient)

CRAFT: Community Reinforcement and Family Training

Behavioral Marital Therapy (BMT)

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**Community Reinforcement and Family Training (CRAFT)**

- Only Concerned Significant Other (CSO) present for sessions (identified substance user not present)
- Usually individual sessions
- Behavioral focus on reinforcing/rewarding abstinent behaviors and removing inadvertent reinforcers of substance use
- Behavioral clinical tools employed, e.g. role plays, problem-solving, self-reports (Happiness Scale) to focus self-care efforts and improve communication skills

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**Family Assessment and Intervention**

- **Assessment of Drinker through Family Reports**
- **Assessment of Family Coping and Drinking-Related Problems**
- **Assure Family Safety**
- **Decrease Protection for Drinker**
- **Family Feedback to the Drinker**
- **Family Requests for Change**
- **Family Support for Change**
- **Self-Care**

Alcohol Problems in Intimate Relationships: Identification and Intervention A Guide for Marriage and Family Therapists: SAMHSA/NIAAA Pub.

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**Behavioral Marital Therapy (1)**

- Treatment based on group couples therapy
  - Initial 6-8 session conjoint meetings (including Antabuse contracting)
  - Couples weekly group lasting 10 sessions
  - Must accept sobriety as a goal
  - Must be lack of significant threat of violence

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Behavioral Marital Therapy (2)

- Alcohol and alcohol-related interactions
  - Review Antabuse contract
  - Review cravings/urges
  - Relapse prevention
  
- Increase positive activities/interactions
  - Notice, acknowledge, & initiate caring behavior
  - Increase shared pleasant activities

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Behavioral Marital Therapy (3)

- Communication skills training
  - Listening and speaking skills
  - Direct expression of feeling
  
- Negotiation of behavior change
  - Learning positive specific requests
  - Negotiation and compromise skills

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Treatment of Co-morbid Emotional Issues

- Characterologic/Coping Skills Deficiencies:
  - Dialectical Behavioral Therapy (DBT)
  - Anger management skill building
  
- Trauma history (after stable recovery):
  - DBT
  - EMDR
  
- Psychiatric Axis I Co-Morbidity:
  - Medication and behavioral therapies

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**Co-occurrence of Psychiatric Disorders with Substance Abuse and Dependence**

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- Psychiatric symptoms and disorders frequently co-occur with substance dependence
  - 20-60% of persons entering addiction treatment may have co-occurring psychiatric disorders
- Co-occurring psychiatric symptoms may represent:
  - Psychiatric symptoms resulting from drug/alcohol use
  - Independent/autonomous Axis I and Axis II disorders
  - Substance-induced disorders (including toxicity, withdrawal, protracted abstinence syndromes)
  - Psychiatric disorders triggered/unmasked by substance use

Nunes et al, 2004; Sacks & Ries, 2005; CSAT TIP 42

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**Anxiety and Mood Disorders**

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- Anxiety disorder vs. "anxiety" or "stress"
- Identified syndromes:
  - Depression with anxiety
  - Panic disorder
  - Obsessive Compulsive Disorder
  - Post Traumatic Stress Disorder
  - Phobias
  - Generalized anxiety disorder
  - Anxiety associated with medical condition
  - Anxiety/depression associated with Substance Abuse
  - Bipolar disorder
  - Axis II disorder (eg: Borderline Personality)
- Minimize role of long term benzodiazepines
- Recognize utility of behavioral interventions

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**Personality Disorders**

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- **Cluster A: Odd/eccentric**
  - Paranoid
  - Schizoid
  - Schizotypal
- **Cluster B: Dramatic/emotional/erratic**
  - Antisocial
  - Borderline
  - Histrionic
  - Narcissistic
- **Cluster C: Anxious/fearful**
  - Avoidant
  - Dependent
  - Obsessive/Compulsive

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Personality Disorders: High Risk

- Cluster B: **Dramatic/emotional/erratic**
  - Antisocial:** Disregard for others/lack of remorse or empathy
  - Borderline:** Instability of relationships and affect/impulsivity
  - Histrionic:** Emotionality/attention seeking
  - Narcissistic:** Grandiosity/need for admiration
- Cluster C: **Anxious/fearful**
  - Avoidant:** Social inhibition/feelings of inadequacy
  - Dependent:** Need to be cared for/fear of separation
  - Obsessive/Compulsive:** Orderliness/perfectionism/control

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Dialectical Behavior Therapy (DBT):  
Basic Treatment Components

- Manualized behavioral treatment utilizing validation and motivational enhancement techniques
- Often combination of group and individual elements
- Addresses enhancement of 4 basic capabilities:
  - Interpersonal effectiveness
  - Emotional and self regulation capacities
  - Ability to tolerate distress
  - Mindfulness

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Developing Coping Strategies:

- Coping with craving
- Coping with:
  - Emotional triggers/dyphoria
  - Anger
  - Anxiety
- Role of mindfulness
- Role of non-using fun

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### Emotion Regulation

Most people think the sequence goes:

Event → Emotion → Action

Instead, we teach:

Event → Self-Talk → Body Response → Emotion → Action

And encourage patients to have sober FUN regularly to offset events they can't control.

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### Distress Tolerance

...how to get through difficult situations when you can't solve the problem (right away, or at all) without making things worse (using).

- Distractions
- Prayer, meaning
- Self-soothing
- (Radical) Acceptance

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### Behavioral Therapies: Groups

- Modal format for substance abuse psychotherapy:
  - More economical than individual therapy
  - All major schools of individual therapy have been adapted to group

- Advantages:
  - Modeling, varied coping skills
  - Public affirmations, confession, support
  - Networks of support

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**Behavioral Therapies: Individual**

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- Privacy
- Flexibility to address issues as they arise
- Focus on unique individual relevant issues
- More practical size for some providers
- Avoidant patients may do better (e.g. schizophrenics, traumatized)

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**Role of Medication in  
in Substance Abuse Treatment**

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- Withdrawal management
- Psychiatric co-morbidity
- To support primary addiction treatment:  
"Relapse Prevention"  
"Anti-Craving"

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**Medication Assisted Treatment for  
Primary Addiction Treatment**

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Demonstrated efficacy and FDA approval:

- Alcohol:
  - disulfiram, naltrexone, acamprosate
- Nicotine:
  - nicotine replacement, bupropion, varenicline
- Opioids:
  - agonist: methadone, buprenorphine/naloxone
  - antagonist: naltrexone

Preliminary findings of efficacy for Cannabinoids/Cocaine

**All efficacy demonstrated in combination with participation in non-pharmacologic treatment.**

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**MAT for Opioid Abuse: Agonist/Substitution Therapy**

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- *Rationale for Substitution Therapy:*
  - Cross-tolerance
  - Prevents withdrawal
  - Relieves craving
  - Blocks euphoric effects of other opioids
  - Appropriate for illicit or prescription opioid abuse
- *Available alternatives:*
  - Methadone: dispensed through licensed opioid treatment program (OTP)
  - Buprenorphine (Subutex/Suboxone): prescribed through office based opioid treatment (OBOT)

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**Buprenorphine: Benefits of Pharmacology**

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1. **Partial agonist**
  - results in a 'ceiling effect' on respiratory depression
  - has a lower reinforcing effect than full agonist
2. **Slow onto the receptor** minimizing euphoria
3. **Very high affinity** for the mu receptor
  - results in the ability to displace other opioids
  - makes it difficult for other opioids to displace it
  - results in easier taper and withdrawal

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**Antagonist Tx. for Opioid Dependence: Naltrexone**

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- Antagonist: naltrexone binds with and blocks opioid receptors
- Available as an FDA approved oral preparation (ReVia)
- Compliance improved by monitored dosing
- IM sustained release (monthly) preparation available (Vivitrol)
- Recently FDA approved for alcohol dependence as well as opioid dependence

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**Adjunctive Medications for Cocaine and Other Stimulants**

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- **Disulfiram (Antabuse)**  
Clearest efficacy in co-morbid alcohol/cocaine abuse by eliminating use of alcohol
- **Stimulant agonist medications:**  
Modafinil (Provigil)  
Methylphenidate (Ritalin)
- **GABA active agents:**  
Baclofen  
Topiramate (Topamax)  
Tiagabine (Gabitril)

Vocci FJ et al. American J of Psychiatry. 2005  
Kenna GA et al. CNS Drugs. 2007

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**Medication Assisted Treatment: Is It Effective?**

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- Literature review and meta-analysis: 2003:
- More effective than non-pharmacologic approaches in terms of retention in treatment and decreased opiate use.
- In clinical trials shown to reduce opiate use greater than drug-free treatment or detoxification.
- No difference in outcome between buprenorphine and methadone.
- Mattick, RP, et al. MMT Versus No Opioid Replacement Therapy for Opioid Dependence. Mattick, RP, et al: Buprenorphine versus Placebo or Methadone. The Cochrane Library, 2003

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**Assess/Treat/Monitor/Adjust**

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- Adequate assessment for:  
Diagnosis of abuse or dependence  
Withdrawal risk  
Medical and psychiatric co-morbidities
- Assess readiness to change
- Develop treatment plan/treatment matching
- Monitor and adjust treatment plan as ongoing process

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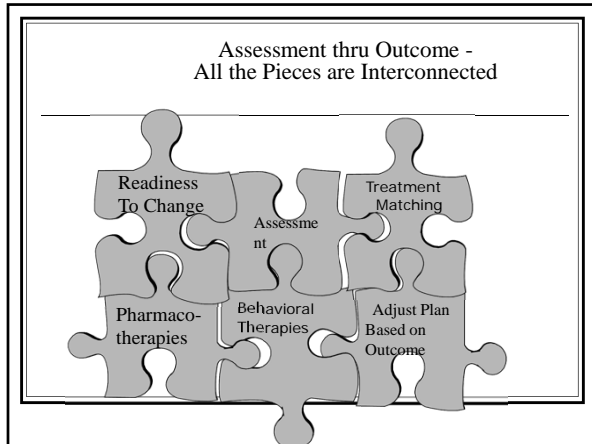
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- Assessment: Comprehensive
- Quantify/frequency/duration
  - Impact on life/relations/performance/legal:
    - Physical -Psychological -Family
    - Job -Legal
  - Evaluate for psychiatric co-morbidity
  - Evaluate for medical consequences
    - Trauma -Depression -Insomnia
    - Hypertension -GI Symptoms
  - Evaluate lab data/Drug Screens
  - Assess recovery environment
  - Assess Readiness to Change

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- Assess Pattern/Consequence Systematically
- **AUDIT** - Alcohol Use Disorders Identification Test
    - WHO 1989, 10 Questions, 5 minutes
    - Hazardous Use or Harm to Health
    - #1-3: Quantity/frequency
    - #4-10: dependence + consequences
    - Validated performance across wide variety of settings, gender, nationalities

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Assess Consequences Systematically

- **Addiction Severity Index (ASI)** (1980, 1985, 1992)
  - Semi-structured interview
  - Validated in wide range of settings
  - Useful for treatment planning and outcome evaluation
  - 1 hour administration by interviewer
  - Computerized scoring available

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ASI Composite Scores

- Past 30-day Severity of Problems (scores 0.0-1.0)
  1. Medical
  2. Employment
  3. Alcohol Use
  4. Drug Use
  5. Legal
  6. Family/Social
  7. Psychological

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Assess Consequences Systematically

- **MAST & SMAST & BMST**  
(Michigan Alcoholism Screening Tests: Original, Short, Brief)
  - 25-, 13-, or 10-Item Questionnaires
  - Self-administered, rapid, effective
  - Lifetime Alcohol-related Problems/Alcoholism

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Assess Consequences Systematically

- **SAAST** (Self-Administered Alcoholism Screening Test)
  - 37-items, MAST-like,
  - Copyrighted Mayo Clinic
  - Questions include: loss of control, occupational & social disruption, emotional consequences, concerns of family & friends
  - Administered by patient, family, or friend

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Assess Withdrawal Systematically

**CIWA-Ar** : Clinical Institute Withdrawal Assessment for Alcohol-Revised)

- Addiction Research Foundation, Toronto
- Initial assessment/ongoing monitoring of withdrawal
- Evaluated only for treatment settings
- 10 Parameters, scored on scales of 1-7
- Objective and subjective types measures
- High inter-rater reliability

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Diagnose by DSM IV Criteria: Dependence

**Maladaptive pattern of use leading to clinically significant impairment or distress, manifested within a 12-month period by at least 3 of the following:**

1. Tolerance
2. Withdrawal
3. Loss of control over amount consumed
4. Preoccupation with controlling use
5. Preoccupation with related activities
6. Impairment of social, occupational, or recreational activities
7. Use is continued despite persistent problems related to use

DSM-IV-TR. American Psychiatric Association: Washington, DC; 2000.

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How does this change with prescription medications?

- "But I need it for my pain...I need it for my anxiety..."
- "But that's not my drug of choice...I never had a problem with Xanax, only with opiates...?"
- "But I've got a prescription for the Xanax...Percocets...(whatever)?"
- "I don't want you to talk to my doctor...that's private."

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Bottom Lines Regarding Evaluation for Rx Meds

- Still have to do the *same basic evaluation*, whether it's a prescribed drug or illicit drug:
  - Pattern of use/Risk/Problems/Control
  - Use all available information from different sources
  - Use appropriate drug screening
- Do need to get information from the *prescribing clinician*
  - Indication for med/Patterns of use/Problems
  - Information about the prescriber
- Evaluate for abuse or addiction but also for *co-morbidities*

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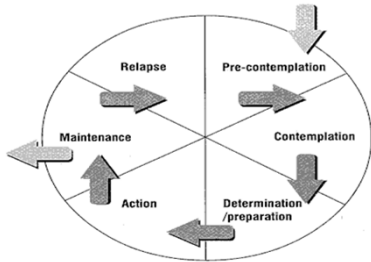
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Assess Readiness to Change



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**Individuals change when:**

- They believe they have a problem (DiClemente, 1991)
- They feel they can be effective (Bandura, 1977)
- They participate in setting the goals (Ockene, 1988)

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**Patient-Treatment Matching**

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Project MATCH

- Prospective, randomized design  
MI/CBT/12 Step Facilitation
- >1000 patients, over 4 years, with >90% follow-up
- 90% Reduction in drinking seen by week 2 of study (drinks per drinking day, drinking days in prior month)
- No significant differences in outcome found between 3 options.

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**Patient-Treatment Matching**

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ASAM Patient Placement Criteria

Useful in multi-dimensional care planning

- Withdrawal Risks
- Biomedical Conditions
- Emotional and Behavioral Conditions
- Readiness to Change (Treatment Resistance)
- Relapse/Continued Use Potential
- Recovery Environment

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**Patient-Treatment Matching**

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ASAM Patient Placement Criteria

- Preliminary studies show validity of model and predictive utility for treatment assignment
- Widely used tool
- Has helped build consensus among a broad range of health care agents and treatment providers

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**Monitor for Effectiveness/Outcome**

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- Monitor not just in terms of sobriety/abstinence
- Monitor in terms of functional improvement:
  - emotional
  - interpersonal
  - medical
  - occupational
  - legal

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**Adapting Treatment Based on Ongoing Assessment and Outcome**

- Increase level of care
- Improve recovery environment
  - Joblessness - Homelessness
  - Substance users in living environment
- Assess treatment for co-morbid psych problems
- Leverage what is different since last contact?
- What follow-up plans did he complete/not complete?
- What is going well, what not so well?
- Is there now a need for medication assisted treatment?

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Further Adaptation as Indicated

- Rearrange reinforcements
- Reassess for ambivalence re change process
- Increase self-efficacy: build on successes
- Increase skills for tolerating negative affects
  
- **Client-centered treatment strategies in association with confrontation**

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**Change Mechanisms and Efficacy  
How Can We Do Better?**

Take advantage of what we know:

- Utilize pharmacologic and non-pharmacologic treatment approaches that research shows are most effective
- Adapt treatments dependent on outcome/progress

Take advantage of all opportunities to:

- Use motivational approach to keep patients engaged with treatment
- Adapt treatments to address patients at various stages of change

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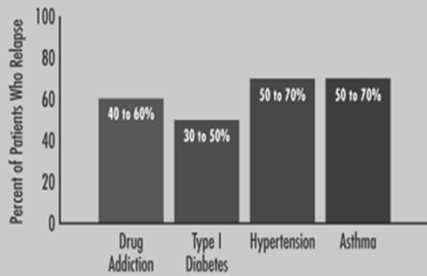
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**COMPARISON OF RELAPSE RATES BETWEEN  
DRUG ADDICTION AND OTHER CHRONIC ILLNESSES**



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### National and Community Resources

- Local LME MH networks:
  - www.ncdhhs.gov/mhd/sas/lmedirectory.htm
- NC Community Health Centers (FQHCs):
  - www.ncchca.org
- NC Community Care Clinics (CCNCs):
  - www.communitycarenc.org
- National Database of SA and MH Treatment Providers:
  - www.dasis3.samhsa.gov
- American Society of Addiction Medicine:
  - www.asam.org
- NC Governor's Institute on Substance Abuse:
  - www.governorsinstitute.org

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Community Care of North Carolina

Source: CCNC March 2013

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NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services

Local Contacts: Local Management Entities by County

Local Management Entities (LMEs) are where you go to find information on receiving mental health, developmental disability or substance abuse services in your county. LMEs will also help you with complaints about your services. They are available 24 hours a day. In order to find your LME, they are listed below by county. There is also a list by LME below.

NC Council of Community Programs | NC Association of County Commissioners | LME/COO map (PDF) (2/13)

[Equivalent Items Notice](#) | [Collapse Items Below](#)

**Alameda**

**Cardinal Innovations Healthcare Solutions/Corporate Office**  
4855 Pilstone Avenue  
Kannapolis, NC 28081  
Phone: 704-639-7700  
Fax: 704-639-7967  
24-hour Access / Crisis Number: 800-939-9911  
Area Director: Faith Stigman

**Alameda-Caswell Community Operations Center**  
2451 South Church Street  
Burlington, NC 27215  
Phone: 336-313-4222  
Fax: 336-313-4225  
24-hour Access / Crisis Number: 888-943-1444

**Five County Community Operations Center**  
134 South Garrett Street  
Henderson, NC 27536  
Phone: 352-430-1330

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North Carolina Community Health Center Association

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About Us Programs & Services Resources & Publications Career Center Calendar

**Our Mission**  
To promote and support patient-governed community health care organizations and the populations they serve.

**Our Vision**  
Every North Carolina community will have access to a patient-centered, patient-governed, culturally competent health care home that integrates high-quality medical, pharmacy, dental, vision, behavioral health, and enabling services without regard to a person's ability to pay.

**What is a Community Health Center?**  
The North Carolina Community Health Center Association (NCHCA) serves as the collective voice for North Carolina's 34 Federally Qualified Health Centers (FQHCs) and Look-alikes (LA). Federally Qualified Health Centers (also Community Health Centers) are 34 facilities and are geographically dispersed across the state through 101 sites. In 2011, FQHCs served over 411,000 patients, with Look-alikes serving another 30,000. FQHCs provide a patient-governed, patient-centered health care home that integrates high-quality medical, pharmacy, dental, behavioral health, and enabling services without regard to a person's ability to pay.

Find a North Carolina Community Health Center Near You  
[Become a Community Health Center](#)

**Upcoming Events**

- SEP 04 Advocacy Coordination (Virtual) Development
- SEP 04 American Diabetes (ADA) National Diabetes (Diabetes) Conference
- SEP 09 Government Affairs (Virtual) Conference

View All Events

**NCHCA Group Purchasing Program**

**ncscha**

Interested in doing business with NCHCA or NCHCA's member health centers? Contact us for more information & how to connect you directly.

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