

WF05: Learning from Patients in Recovery (PIR): What should the internist know about opioid dependence?

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Learning Objectives

By the end of this workshop participants should be able to:

1. Describe the role of
 - Methadone,
 - Buprenorphine, and
 - Non-pharmacological/behavioral approachesin the management of opioid-related disorders
2. Translate the lessons learned from Patients in Recovery (PIR) into their individual practices

Epidemiology

- 12.6 million people reported using prescription opioids for non-medical purposes in last month
 - 1.6m with opioid dependence or abuse
- 560,000 people used heroin in the last month
 - 323,000 with opioid dependence or abuse
- 250,000 – in methadone maintenance
 - Treatment slots fixed in number, limited geographically

Treatment Options: *Methadone*

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Methadone Hydrochloride

- Full opioid agonist available in tablets, oral solution, parenteral
- PO onset of action 30-60 minutes
- Duration of action
 - 24-36 hours to prevent opioid withdrawal
 - 6-8 hours analgesia
- Proper dosing
 - Acute withdrawal 20-40 mg
 - Craving, “narcotic blockade” >80 mg

Goals of Methadone Treatment

1. Treat withdrawal syndrome – (low doses)
2. Narcotic blockade - (higher doses)
3. Control cravings – (higher doses)
4. Normalize brain changes
5. Stabilize and engage in counseling, mental health and medical treatment

Opioid Detoxification Outcomes

- Low rate of retention in treatment
- High rates of relapse
 - 50% at 6 months
 - 80% at 12 months

Methadone Maintenance (MMT) Outcomes

In a Comprehensive Rehabilitation Program...

- Improves overall survival
- Increases retention in treatment
- Decreases illicit opioid use
- Decreases seroconversion of hepatitis and HIV
- Normalizes immune and endocrine systems
- Decreases criminal activity
- Increases employment
- Improves birth outcomes

NIH Consensus Panel on Treatment of Opiate Addiction

- 12 member multi-disciplinary panel, Nov. 1997
- heard testimony from 25 experts
- reviewed 941 research reports published over the period Jan. 1994 - Sept. 1997

“Of the various treatments available, MMT, combined with attention to medical, psychiatric, and socioeconomic issues, as well as drug counseling, has the highest probability of being effective.”

Methadone Maintenance Treatment Regulations

- Narcotic Addict Treatment Act of 1974 (NATA)
 - Established Opioid Treatment Programs (OTP)
 - Regulated by the DEA (diversion control)
 - Regulated by the FDA (public health safety)
 - Heavy on administrative requirements and not on treatment outcomes

Maintenance Requirements

- Daily attendance observed for 90 days
 - Take-home doses after 90 days for those meeting criteria
- At least once per month observed urinalysis
- Assigned Primary counselor
- Weekly group and/or individual counseling for at least 90 days

Methadone Maintenance Limitations

- Stigma
- Limited access/long waiting lists
- Separate system not involving primary care physicians or pharmacists
- Inconvenient and often highly punitive
- Mixes stable and unstable patients
- No ability to “graduate” from program

How long should methadone
treatment last?

Long Enough

New Federal Initiatives

- Drug Addiction Treatment Act (DATA) 2000
 - Allows treatment of opioid dependence in primary care settings by qualified physicians using approved medications
- March 2000 Federal Advisory
 - Opioid Treatment Program-based *exemptions* for office-based methadone maintenance “Medical Maintenance” in primary care

Treatment Options:
Office-Based Treatment

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VA Pittsburgh Healthcare System

Problems With Current System

- Less than 20% of opioid dependent persons are receiving treatment in traditional settings
- Poor clinic retention
 - Environment inhibits recovery
 - Highly regulated doses & take homes
- Criteria exclude persons under age 18
- Infrastructure of care
 - High turnover of staff
 - Ability to get to treatment may be limited

Opioid Treatment: Changing Approach

Methadone Clinic

- Criteria:
 - Withdrawal
 - 12 months use
- Dose regulated
- Age > 18
- Limited take homes
- Services “required”

Office-Based treatments

- Criteria:
 - DSM IV
 - No time criteria
- MD sets dose
- Age > 16
- Take homes (30 days)
- Services must be “available”

Buprenorphine Properties

- Partial-agonist
 - Less reinforcing than a full agonist-milder effects
 - Easier withdrawal
 - Safety – overdose ceiling effect
- High affinity to the opiate receptor
- Long duration of action (24-72hrs)
- Strong safety profile
 - Little respiratory depression
 - Little overdose potential

Buprenorphine Formulations

- Formulations and routes
 - **BUPRENEX IV** *NOT for Opioid Dependence*
 - Long history within Anesthesiology
 - History of use as mild analgesic
 - **SUBUTEX SL - Buprenorphine**
 - 2 mg tablet
 - 8 mg tablet
 - Really one indication... (Pregnancy)
 - **SUBOXONE SL – Buprenorphine/Naloxone**
 - 2mg/0.5mg tablet
 - 8mg/2mg tablet
 - **(Buprenorphine Transdermal)**
 - **(Buprenorphine Depot Injection)**

Most often heard quote with Buprenorphine

“Doc, I feel normal”

- Treatment in normal medical settings:
 - Encourages continuity of medical/specialty care
 - Encourages relationship building with clinicians
 - Legitimize opioid dependence as a normal, treatable, chronic illness

Treatment Options:

Non-pharmacological/Behavioral

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National Institute on Drug Abuse

National Institutes of Health

Johns Hopkins School of Medicine

Non-pharmacological treatment approaches

- 12-step facilitation (NA, AA, etc.)
- Cognitive-behavioral coping skills treatment (CBT)
- Motivational interviewing (MI)
- Therapeutic community (TC)
- Combination approaches – e.g., Matrix model
- Community Reinforcement and Contingency Management (CR & CM)

12-Step Facilitation Approach

- Minnesota Model late 1940s
- Underlying belief - alcoholism is a primary, progressive disease, with biological, psychological, and spiritual features
- Homework – reading, journaling, and undertaking recovery tasks that personalize the 12 Steps
- Support - sponsor, home group, and network

Strengths and challenges of 12-Step approaches

Strengths	Challenges
Meetings are free, widely available, and provide an ongoing source of support. General meetings and those with a specialized focus exist.	Difficult to monitor – step tasks and meeting attendance
Emphasizes recovery tasks in many areas – cognitive, spiritual, and health	Emphasis on a higher power may be unacceptable to some clients
Effective with clients from diverse backgrounds (Tonigan 2003)	Some communities may not be large enough to sustain meetings

Cognitive-Behavioral Coping Skills Treatment (CBT)

- Most emotional and behavioral reactions are learned and that new ways of reacting and behaving can also be learned
- Identify personal “cues” or “triggers” – internal/external
- Teach new coping and problem-solving skills
- Role-playing high-risk situations and responses
- Recognize, Avoid, and Cope
- Can be applied to other challenges in recovery – interpersonal relations, depression, anxiety, and anger management

Strengths and challenges of Cognitive-Behavioral approaches

Strengths	Challenges
Actively engages clients in therapy and experiential learning	Clients w/ poor reading or cognitive skills may need alternatives to written assignments
Numerous CBT manuals are available	Requires counselor training
Suitable for clients of diverse backgrounds and varied histories	Client motivation is critical because of the extent of homework assignments
Provides structured methods for understanding relapse triggers and preparing for relapse situations	Developed as an individual, not a group, counseling approach

Motivational approaches

Motivational Interviewing (MI) – Miller & Rollnick 2002

Client-centered, empathic, directive counseling to explore & reduce ambivalence towards treatment

1. Express empathy
2. Identify discrepancies
3. Roll w/ resistance and avoid arguing
4. Support self-efficacy

Motivational Enhancement Therapy (MET)

- Utilizes structured instruments for assessing dimensions of substance use
- Counselor feedback on structured instruments and responses to feedback explored

Strengths and challenges of Motivational approaches

Strengths	Challenges
Client centered and relevant to clients' personal interests	Rely heavily on clients' capabilities and level of self-awareness
Focus is on realistic, attainable goals	Many problem-oriented assessments are incompatible
Encourage client self-efficacy and self-sufficiency	Lack guidance when dealing w/ ambivalent clients
Emphasize positive, empathic support that does not undermine or elicit anger from clients	Require significant staff training, reorientation, and ongoing supervision
	Difficult to combine w/ disease- or therapeutic community-oriented approaches that expect adherence to program-imposed goals
	Individual approach, unproved effectiveness in groups

Therapeutic Community Approach

- “Community as method” - de Leon 2000
- Recovery as a developmental process, community as the therapeutic agent
- Essential beliefs and values
 - Demonstrating truth and honesty
 - Remaining in the “here and now”
 - Assuming personal responsibility
 - Demonstrating concern for others
 - Developing a work ethic, economic self-reliance
 - Distinguishing between external behavior and inner-self
 - Accepting change is the only certainty
 - Valuing the learning process
 - Becoming involved in one’s community
 - Developing good citizenship

Strengths and challenges of the Therapeutic Community approach

Strengths	Challenges
Effective for people with long histories of substance dependence	May be too confrontational for some clients
Particularly effective in teaching clients how to plan, set, and achieve goals and to be accountable	Requires extensive staff training
Effective in reducing recidivism among clients who have served time in prison	Treating clients with mental disorders can pose difficulties
	Finding an effective mix of professional clinicians and recovering staff can take time

Combination approaches – e.g., The Matrix Model

- MM is used as the example because it is comprehensive, manual-based, and has evaluation data
- Developed in 1980s to address stimulant dependency
- Originally known as – neurobehavioral treatment
- Integrates several evidence-based techniques – CBT, 12 Step, and MET

Strengths and challenges of the Matrix Model Treatment

Strengths	Challenges
Integrates CBT, family involvement, psychosocial education, 12-Step support, & urine testing	Materials may need to be modified for clients w/ impaired cognitive functioning
Manual-based w/ specific exercises (NCADI)	Requires staff training and supervision
Used extensively in stimulant-dependence and shown effective	Highly structured, may not appeal to all clients
	Tight structure & schedule may not leave time for identification & stabilization of other non-drug-specific problems

Community Reinforcement and Contingency Management approaches

- Based on operant conditioning theory
- Future behavior is based on positive or negative consequences of past behavior
- Abstinence alone may not be sufficiently reinforcing
- CR considers reinforcers from a socially-mediated perspective

Strengths and challenges of Community Reinforcement and Contingency Management approaches

Strengths	Challenges
Shown to reduce drug use significantly when incentives are use	Clients may return to drug use when incentives are terminated
May combine w/ other psychosocial interventions & pharmacotherapies	Can be labor intensive, require specialized staff/training and frequent clinic attendance
May be implemented w/ a variety of low-cost incentives	For maximal effectiveness, incentives must be sufficiently large and increase in value to maintain appeal to clients
Proved effective for reducing drug use and increasing treatment compliance	Effectiveness has been demonstrated but studies have small samples and large costs for incentives
Have extensive & robust scientific support in both lab & clinical studies	Resources (onsite urine-testing or incentives) may be unavailable
	Lack of emphasis on long-term supports is a potential drawback

Supporting evidence

- Project MATCH – CBT comparable to MET and 12-Step facilitation for decreasing alcohol use and alcohol-related problems, positive outcomes persisted for up to 3 years (Project MATCH 1998)
- Drug Abuse Treatment Outcome Study – upon program completion TC clients had lower drug use, criminal behavior, unemployment, and depression than prior to treatment (NIDA 2002)
- Higgins et al. – 75% of CR plus voucher clients completed the program vs. only 11% of standard-care clients and adding redeemable vouchers was more effective than CR as a standalone treatment (Higgins et al. 1995)

Thank you!

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Print resources

- Joseph H, Stancliff S, Langrod J. Methadone Maintenance Treatment (MMT): A Review of Historical and Clinical Issues. *The Mount Sinai Journal of Medicine*, Oct/Nov 2000:237-64.
- Carroll KM, A Cognitive-Behavioral Approach: Treating Cocaine Addiction, US Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, 1998.
- TIP 35, Enhancing Motivation for Change in Substance Abuse Treatment [CSAT 1999c]
- Therapeutic Community Curriculum [CSAT 2006g, CSAT 2006h]
- Matrix Intensive Outpatient Treatment for People With Stimulant USE Disorders [CSAT 2006c, CSAT 2006d]
- Budney AJ, Higgins ST. A Community Reinforcement Plus Vouchers Approach: Treating Cocaine Addiction. Manual 2: Therapy Manuals for Drug Addiction Series. NIH Publication No. 98-4309. Rockville, MD: National Institute on Drug Abuse, 1998.

Electronic resources

- National Institute on Drug Abuse – www.nida.nih.gov
- NIAAA Web site: <http://www.niaaa.nih.gov/>
- Substance Abuse and Mental Health Services Administration's National Clearinghouse for Alcohol and Drug Information – www.ncadi.samhsa.gov
- SAMHSA's Center for Substance Abuse Treatment (CSAT) – www.csat.samhsa.gov
- Hazeldon Foundation – www.hazeldon.org
- Buprenorphine Information: www.buprenorphine.samhsa.gov
- Medication information: <http://www.suboxone.com>
- Physician Clinical Support System (PCSS)-National Mentor for Physicians Treating Opiate Dependence. <http://www.PCSSmentor.org>