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 approaches
   in 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

NSDUH 2007 and SAMHSA Determinations report 2006
Treatment Options: Methadone

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Boston Medical Center
Boston Public Health Commission
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 socio-economic issues, as well as drug counseling, has the highest probability of being effective.”

JAMA 1998, 280 (22), 1936-1943
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

Adam J. Gordon, MD, MPH, FACP
University of Pittsburgh School of Medicine
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”

Gordon, Counterdetails, 2006
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 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

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

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

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

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

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

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


- 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]

Electronic resources

- 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