Advances in Recognition and Treatment of Substance Use Disorders in Primary Care

Elinore F. McCance-Katz, MD, PhD
Medical Director, PCSS-O
Disclosures

• Grant Funding Provided by: NIDA/NIH, NIAAA/NIH, CSAT/SAMHSA
In This Presentation:

SBIRT: What is it and how can it improve medical care and reduce costs?

Review some of the basics of substance abuse treatment that can be accomplished in primary care settings

- Screening (alcohol)
- Brief intervention/motivational interviewing
- Referral to substance abuse treatment settings when needed
- Pharmacotherapy for substance use disorders that can be undertaken in the primary care setting
What is SBIRT?

SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders. Primary care centers, hospital emergency rooms, trauma centers, office-based practices and other community settings provide opportunities for early intervention with at-risk substance users before more severe consequences occur.
Why Do We Need SBIRT?

Problem Substance Use is Highly Prevalent in Americans

<table>
<thead>
<tr>
<th>Substance</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risky Drinking</td>
<td>23%</td>
</tr>
<tr>
<td>Illicit Drug Use</td>
<td>8%</td>
</tr>
<tr>
<td>Substance Abuse or Dependence</td>
<td>10%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>7%</td>
</tr>
<tr>
<td>Illicit Drugs</td>
<td>3%</td>
</tr>
</tbody>
</table>

SAMHSA, National Survey on Drug Use and Health, 2008
SBIRT Components

• **Screening** quickly assesses the severity of substance use and identifies the appropriate level of treatment.
• **Brief intervention** focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change.
• **Referral to treatment** provides those identified as needing more extensive treatment with access to specialty care.
Is SBIRT Effective?

• SBIRT research has shown that large numbers of individuals at risk of developing serious alcohol or other drug problems may be identified through primary care screening.

• Interventions such as SBIRT have been found to:
  - Decrease the frequency and severity of drug and alcohol use,
  - Reduce the risk of trauma
  - Increase the percentage of patients who enter specialized substance abuse treatment.
  - Be associated with
    - fewer hospital days
    - fewer emergency department visits
    - net-cost savings to the health care system from these interventions
What are the Benefits of Screening and Brief Intervention?

- Strong evidence for the effectiveness of brief interventions with alcohol and tobacco use, growing support for use with other substances.
- Minimal amount of time needed to conduct brief interventions.
- Low-cost/cost-effective. For each dollar spent, it has been estimated that $2–$4 (per person) have been saved in terms of health costs and costs related to workforce productivity.

Gentilello, et al., 2005; Fleming, 2002
How to Rapidly Screen for Alcohol Problems

NIAAA Single Question with high sensitivity & specificity:

• **In the past year, how many times have you had 4 (for women) 5 (for men) or more drinks in one day?**
  - 84% sensitive, 78% specific for hazardous drinking
  - 88% sensitive, 67% specific for current AUD

Dawson et al. 2010
Why a Single Question Screener?

- Time constraints
- Clinician preference
- Multiple studies show high sensitivity, specificity for high risk drinking and AUDs
  - Specificity > sensitivity
  - Women > men
- Limitations:
  - Screeners identified from a larger survey
  - Not done in primary care population
- Not diagnostic; meant to prompt further questions
How to Screen for Alcohol Problems

• If NIAAA single question screener is positive:
  - Assess frequency/quantity of drinking.
  - Assess negative impact/functional impairment.
  - Offer advice for cutting back or stopping using a “brief intervention” model.
  - Consider pharmacotherapy.
  - If evidence of DSM-IV dependence refer to substance abuse treatment facility.
What Can the Primary Care Physician Use to Treat Substance Use Disorders?

Selected Pharmacotherapies
General Considerations for SUD Pharmacotherapy

- Tobacco
  - Relapse Prevention
- Alcohol
  - Acute withdrawal
  - Relapse prevention
- Opiates
  - Acute withdrawal
  - Maintenance/Relapse prevention
- Cocaine/Stimulants
  - No approved medications for withdrawal symptoms or relapse prevention
When to Consider Pharmacotherapy

- Consider Precipitant To Treatment And Severity of Associated Medical/Psychiatric/Psychosocial Problems
  - Family
  - Employment
  - Financial
  - Medical
  - Legal
  - Psychiatric comorbidity (*including risk for harm to self or others*)
  - Relapse Potential

- The higher the acuity or severity; greater need for use of medication treatment (if there is an appropriate medication intervention available)

- Most FDA approved medications for SUDs can be used in primary care

- Exception: Methadone maintenance therapy
When to Consider Pharmacotherapy

- Most FDA approved medications for SUDs can be used in outpatient settings
- Exception: Methadone maintenance therapy: can only be used for treatment of opioid addiction in licensed narcotic treatment programs
Cigarette Smoking

FDA approved:

• Nicotine Substitution (Agonist Therapy)
  - Nicotine polacrilex gum
  - Transdermal nicotine patch
  - Nicotine nasal spray
• Bupropion
• Varenicline (nicotine partial agonist)
Cigarette Smoking

Nicotine gum

• Reduces nicotine withdrawal symptoms: anger/irritability, depression, anxiety, decreased concentration
• Effect on craving is minimal
• 2 or 4 mg gum
• Use 4 mg dose for heavy smokers >25 cigarettes daily
• Dosing: 1 piece/hr better than prn for craving
• 50-90% nicotine release depending on chewing rate
• Absorbed through buccal mucosa
• Peak concentrations in 15-30 min (1-2 min for cigarette smoking)
• Avoid acidic foods/beverages decrease absorption of nicotine
• Length of treatment is 4-6 weeks
• Quit rates using gum are 8-10% (M.D. advice); Increases to up to 29% when combined with behavioral treatment

Cigarette Smoking

Transdermal nicotine patch

• 16 h patch delivers 15 mg nicotine
• 24 h patch delivers 21-22 mg nicotine
• Peak levels 6-10 h after application
• Dosing: 8-12 weeks
• Side effects: local irritation, mild gastric, sleep disturbances
• End of treatment smoking cessation: 18-77%
• 6 month abstinence rates: 22-42%
• Can use patch and gum together
Cigarette Smoking

Nicotine nasal spray

• Rapid delivery system of 1 mg nicotine
• Peak nicotine blood level in 10 minutes
• Rapid relief of withdrawal and craving
• Associated with greater sense of control
• Side effects: throat irritation, coughing, sneezing, lacrimation
• Self-taper over 12 weeks
• Use in those who fail nicotine gum and/or patch
Cigarette Smoking

Bupropion

- Dopaminergic/noradrenergic
- Dose: 300 mg sustained release
- Quit after 7-14 days of treatment
- Adverse events: dry mouth, insomnia, stimulation
- Do not use in patients with history of seizures or bulimia
- Can supplement with gum or patch
Cigarette Smoking

Varenicline

- Partial agonist binds to nicotinic receptor
- Does not fully activate receptor
- Modulates receptor activity in the absence of nicotine reducing craving and withdrawal symptoms
- Twice daily oral medication to be started 1 week before quit date (.5 mg/d x 3; .5 BID x 3; 1 mg BID)
- Length of Treatment: 12 weeks
- Monitor for depression/suicidal thinking
- No abuse liability
Maintenance Medications To Prevent Relapse To Alcohol Use (FDA approved)

- Disulfiram
- Naltrexone (oral and injectable)
- Acamprosate
Pharmacotherapy of Alcohol Dependence: Naltrexone

• **Oral Naltrexone Hydrochloride**
  - DOSE: 50 mg per day
• **Extended-Release Injectable Naltrexone** (Garbutt et al, JAMA 2005)
  - 1 injection per month/ 380 mg
Naltrexone Delays the Onset of Relapse to Alcohol

Relapse: \( \geq 5/\geq 4 \) men/women drinks at one sitting
Naltrexone

• Potent inhibitor at mu opioid receptors
• may explain reduction in relapse/craving
  - because endogenous opioids involved in the reinforcing (pleasure) effects of alcohol and possibly craving
Naltrexone Safety

- Can cause hepatocellular injury in **very high** doses (eg 5-10 times higher than normal)
- Contraindicated in acute hepatitis or liver failure
- Check liver function before, q1 month for 3 months, then q 3 months
- Contraindicated if patient needs opioid analgesia
- Caution about ibuprofen and other non-steroidal anti-inflammatory agents
  - May have additive hepatic effects
  - Common AEs: nausea/headache

VA/DoD CPG SUDs, www.oqp.med.va.gov/cpg/SUD/SUD_Vase.htm
Other Alcohol Treatments: Disulfiram and Acamprosate

- **Disulfiram**: inhibits alcohol metabolism; buildup of acetaldehyde causes noxious reaction; dose 250/d (dose needs vary)
- **Contraindicated**: psychosis, significant liver disease, esophageal varices, pregnancy, impulsivity
- **Acamprosate**: Mechanism: Stabilizes glutamatergic neurotransmission altered during withdrawal (Littleton 1995);
  - Anticraving, reduced protracted withdrawal
  - No abuse liability, hypnotic, muscle relaxant, or anxiolytic properties
  - Dose: 2 g daily (2-333 mg pills three times/d)
  - Contraindicated: significant renal disease (creat cl <70 ml/min)
How to Select a Medication

• Disulfiram: when the patient is committed to no further drinking; heavy consequences of relapse
• Naltrexone: for the patient who wants to cut back or get help for craving
• Acamprosate: naltrexone doesn’t work, patient needs opioid analgesia; disulfiram not an option
Pharmacotherapies for Opiate Addiction

- Methadone (Can’t use outside of NTP)
- Buprenorphine
- Naltrexone
Why Would a Primary Care Physician Need to Know about Treating Opiate Addiction?

- Increasing use of opioids to treat chronic pain
- Published rates of abuse and/or addiction in chronic pain populations are 3-19%; making it important to consider in treatment using chronic opioid therapy

Rates of Prescription Pain Medication Abuse

Nonmedical use of prescription pain medications (2009):

- Previous month misuse: 5.2 million over age 12
- 4.6% of those aged 18-25
- Prescription pain medication misuse now second only to marijuana
- In 2006, deaths involving opioid analgesics was 1.63 times the number involving cocaine and 5.88 times the number involving heroin.

Source Where Pain Relievers Were Obtained for Most Recent Nonmedical Use Among Past Year Users Aged 12 or Older: 2006

Source Where Respondent Obtained

- One Doctor: 80.7%
- Bought/Took from Friend/Relative: 14.8%
- More than One Doctor: 3.9%
- Drug Dealer/Stranger: 1.6%
- Bought on Internet: 0.1%
- Other: 4.9%

Source Where Friend/Relative Obtained

- One Doctor: 19.1%
- More than One Doctor: 3.3%
- Free from Friend/Relative: 55.7%
- Bought/Took from Friend/Relative: 7.3%
- Drug Dealer/Stranger: 4.9%
- Other: 2.2%

Note: Totals may not sum to 100% because of rounding or because suppressed estimates are not shown.

1 The Other category includes the sources: “Wrote Fake Prescription,” “Stole from Doctor’s Office/Clinic/Hospital/Pharmacy,” and “Some Other Way.”
Why Are Opioids Being Prescribed More Frequently?

Model Policy for the Use of Controlled Substances for the Treatment of Pain*

• Pain management integral to medical practice
• Opioids may be necessary
• Physicians will not be sanctioned for prescribing opioids for legitimate medical purposes
• Undertreatment of pain will be considered a deviation from the standard of care
• Use of opioids for purposes other than analgesia threaten individuals and society
• Physicians have a responsibility to minimize abuse and diversion

*Federation of State Medical Boards, 2003
Challenges with Opioids for Pain Management

Chronic opioids for non-malignant pain presents many potential problems

• Lack of evidence for efficacy, particularly with high dose opioid therapy
• Syndrome of rebound pain/hyperalgesic states produced by opioid use
• Withdrawal syndromes masquerading as “pain”
• Opioid adverse events: QT prolongation, Torsade de Pointes (shown with methadone)
• Rate of addiction may be underestimated (e.g.: 1% of chronic pain patients receiving opioids vs. 10% rate of SUDs for general population)

Balantyne et al., 2003
What’s the Best Path?

Use Best Practices

- Thorough history and physical examination; get old medical records; query previous treatments and responses/CURES
- Speak with family/S.O. if available
- Diagnostic work-up
- Adequate treatment of acute or chronic pain associated with diagnosed condition/lesion (e.g. metastatic cancer)
- Consider non-opioid options (especially in those with substance abuse history)
- Consider Risk/Benefit of chronic opioid therapy
- Reassess frequently and modify treatment plan as indicated
- Documentation
If You Decide that Opioid Therapy for Chronic Nonmalignant Pain is Indicated for Your Patient

Check urine drug screen initially and periodically:
- Illicit drug use highly correlated with opioid abuse/addiction
- Confirm use of the drug you’re prescribing
- Point of Service vs. Clinical Lab (GC/MS confirmation)
- Pill Counts

Periodic review:
- Evidence of analgesia
- Treat side effects
- Enhanced social/employment functioning
- Overall improved quality of life

Consultation
- Pain specialists
- Psychiatrist (co-occurring mental illness is common)
- Addiction specialist
Approaching Patient with Aberrant Medication-Taking Behavior

- Take non-judgmental stance
- Use open-ended questions
- State your concerns about the behavior
  - Is the patient more focused on specific opioid or pain relief?
- Approach as if they have a relative contraindication to controlled drugs (if not absolute contraindication)
- Take pressure off yourself by referring to clinic policies

Passik SD, Kirsh KL. J Supportive Oncology, 2005.
What to do if Your Patient Develops a Substance Use Disorder with Prescribed Opioids

• Therapeutic Options:
  1. Detoxification (medical withdrawal from opioids); short term pharmacotherapy may occur in inpatient, residential or outpatient settings; patients may benefit from naltrexone following medical withdrawal as medical withdrawal alone has high relapse rate
  2. Naltrexone
  3. Possible methadone maintenance (especially if ongoing opioid analgesia needed)
  4. Buprenorphine

• Medical withdrawal and/or medication therapies should include psychosocial interventions, e.g.: Individual/Group Drug Counseling

• Know the options in your community
Naltrexone

Naltrexone (antagonist therapy)

Why antagonist therapy?

• Block effects of a dose of opiate (Walsh et al. 1996)
• Prevent impulsive use of drug
• Relapse rates high (90%) following detoxification with no medication treatment
• Dose (oral): 50 mg daily, 100 mg every 2 days, 150 mg every third day
• Injectable naltrexone once monthly recently FDA approved

Who gets naltrexone?

- Highly motivated
- Does not want agonist/controlled substance
- Some employment requirements
Office-Based Opioid Dependence Maintenance Therapy

Buprenorphine

- Newest opiate maintenance therapy
- Mu opioid receptor partial agonist
- Binds opioid receptors; slow to dissociate
- Dosing may be daily, every other day or three times weekly
- Little effect on respiration or cardiovascular responses at high doses; safer in overdose
- Mild withdrawal
- Physicians need special certification to prescribe

(McNicholas L, 2004)
Physicians’ Clinical Support System-Buprenorphine

Sponsored by Center for Substance Abuse Treatment/SAMHSA

Ask a clinical question:
- 888-5pcss-b-4u (Buprenorphine)
- 877-630-8812 (Methadone)

From www.PCSSB.org...

- Download clinical tools, helpful forms and concise guidances (like FAQs) on specific questions regarding opioid dependence, use of buprenorphine, information on training and peer support
Why is All of This Important?

- Drug and alcohol use disorders affect approximately 10-15% of the American population
- Screening and early intervention = prevention!
- Substance use disorders are chronic, relapsing diseases that are likely to recur
- Effective pharmacotherapies are available and can be implemented in primary care
- Substance abuse can negatively impact other illnesses present in the patient (e.g.: alcoholic cardiomyopathy, COPD, HIV/AIDS, HCV, other ID)
- May masquerade as an illness that the patient does not have (e.g.: HTN, seizure d/o, mental disorders)
- Can contribute to non-adherence to prescribed regimens, toxicities due to drug interactions
Please Click the Link Below to Access the Post Test for the Online Module

Upon completion of the Post Test:

• You will receive an email detailing correct answers, explanations and references for each question.
• You will be directed to a module evaluation, upon completion of which you will be emailed your module Certificate of Completion.

http://www.cvent.com/d/rcq9j9