Chronic Pain and Opioid Use Disorders in the Military



Disclaimer

The views expressed are those of the presenter and do not necessarily reflect the opinions of the Uniformed Services University of the Health Sciences, the Department of Defense, or the U.S. Government.



Learning Objectives

- 1. Describe common trends in chronic pain and opioids, and alternative approaches to managing chronic pain.
- 2. Define opioid use disorder and review evidence base for treatments.
- 3. Discuss screening instruments for opioid use disorders and guidelines for managing opioid use disorders and co-occurring pain with military clients.



Acute Pain

- Normal physiological response
- Enhances survival
- Warns of disease progression
- Management of acute pain can prevent the onset of physiological changes that lead to chronic pain



Chronic Pain

- Changes in the central nervous system
- If everything has been done to maximize recovery, it serves no useful purpose
- Frustrates patients and doctors



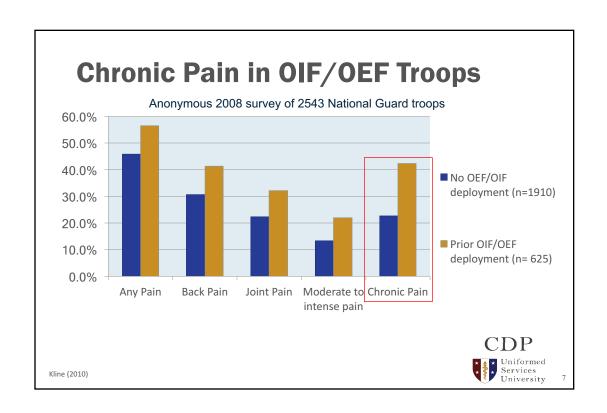
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Prevalence of Chronic Pain

- 11-40% of the adult population reports chronic pain
 - 11% have pain everyday
 - 5% severe pain everyday
- Highest reports in: females, older adults, non-Hispanic

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Nahin (2015); Boudreau et al. (2009); Center for Behavioral Health Statistics and Quality (2014)



Military Risk Factors

- Heavy packs create shearing forces that cause low back pain
- Operational driving and flight (ATVs and rotary wing aircraft)
- Psychological risks of combat





Photo by Sgt. Joel Salgado, U.S. Army Europe Public Affairs. https://creativecommons.org/licenses/by/2.0/

Pain Issues Specific to the Military

- Military culture and training
- Physical Fitness Tests





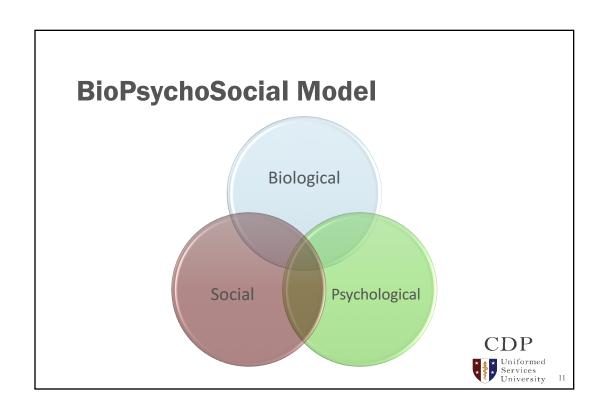


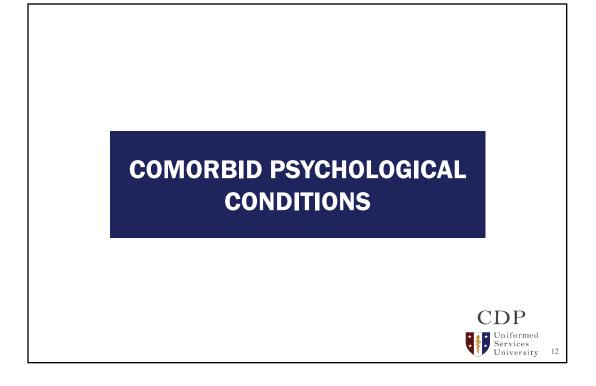
Theories of Pain

Specificity Theory

Level of pain= tissue damage

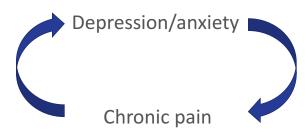






Chronic Pain, Depression, and Anxiety

- 13% of general population w/ depression or anxiety
 vs. 24% of chronic pain population w/ depression or anxiety
- 50% of chronic pain population w/ insomnia Bidirectional:



Tsang (2008); Taylor (2007)

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PTSD and Suicide

PTSD

- 66-80% of Vietnam Vets w/ PTSD report chronic pain
- OIF/OEF Vets w/ PTSD >2x as likely to report pain

Suicide

- Chronic pain patients have 2x rate of suicide as non-pain
- Chronic pain patients often have access to lethal medications



Highlights

- 1. Chronic pain is highly prevalent, particularly in deployed military
- 2. Chronic pain is influenced by bio, psycho, and social factors
- 3. Chronic pain is associated with multiple psychological disorders
 - Pain -> greater risk for psychological disorders
 - Psychological disorders -> greater risk for pain
- 4. Where do opioids fall within this, are they an appropriate treatment?

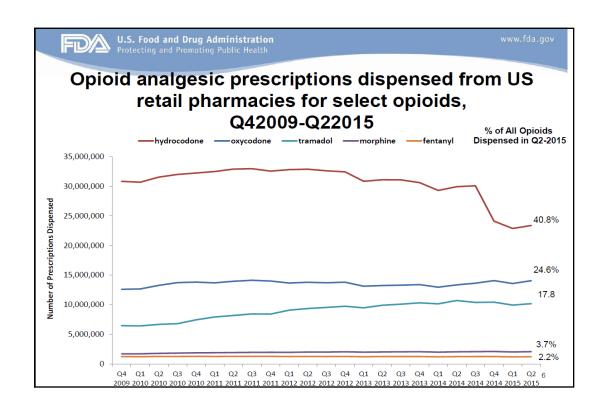


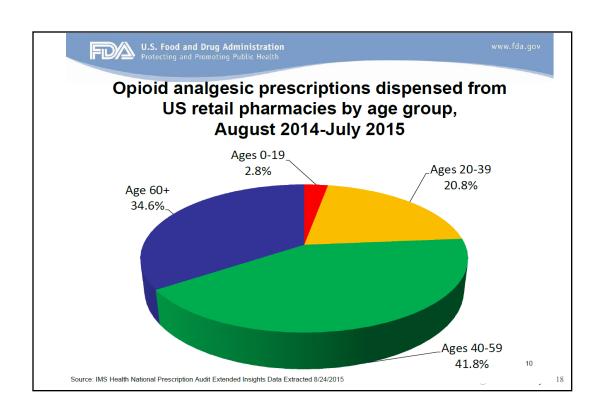
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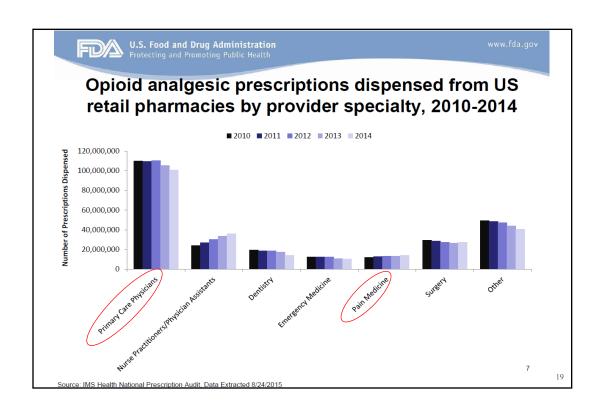
TRENDS IN OPIOID MISUSE AND

ALTERNATIVE APPROACHES TO MANAGING CHRONIC PAIN









Prescribing in the Military

- $\ ^{\sim} 4 \ \text{out of 5 opioid prescriptions written by PCMs}$
- 2002-2011, total prescriptions by VA physicians up 37%
 - Prescriptions written for oxycodone rose 150%
 - Prescriptions for hydrocodone rose 360%
- Good news: 2011-2017
 - Prescriptions for opioids dropped 2%
 - 12 pill limit prescriptions up 12%



Opioid (Ab)use

- 3-4% of adults receive long-term opioids
 - 10 million used non-medically (i.e., not prescribed to them or were taken only for the high)
- Retrospective of ~940,000 pain patients receiving opioids

Random urine drug screens:

- 38% had undetectable level of opioids
- 27% had higher level than prescribed; 15% had lower level than prescribed
- 29% had non-prescribed med present
- 11% had illicit drugs present



Couto et al. (2009); Boudreau et al. (2009); Center for Behavioral Health Statistics and Quality (2014)

Is it really an "epidemic"?

How is it similar to other epidemics of *infectious disease*?

- High mortality rate
- Increasing over time without a clear leveling off point
- "Spreads" from one person to another (diversion of pills, street drugs, social influence)
- Difficulty containing, crosses borders
- It is becoming stronger overtime
 Higher concentrations are being distributed at lower cost
- Even a discussion of creating a vaccine



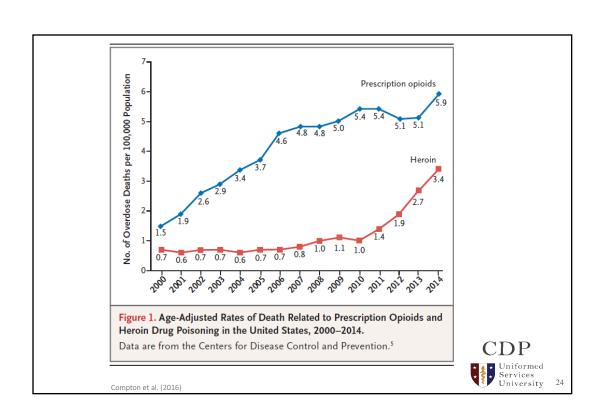
Primary Care of Patients with Chronic Pain

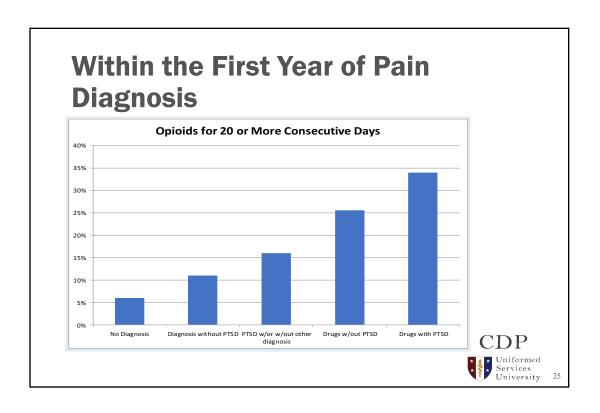
2017 JAMA:

Schneiderhan et al. (2017)

- <u>1/6</u> adult population susceptible to misuse
 - Escalated dose, shift to street drugs, addiction, unintentional overdose
- "There is no evidence that opioids are effective in chronic pain conditions, and significant evidence that they cause harm"
 - Most articles <u>did not</u> walk this far, however, it exemplifies the debate
 - At this point accepted as *last* resort for individuals

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Recommendations for Chronic Pain

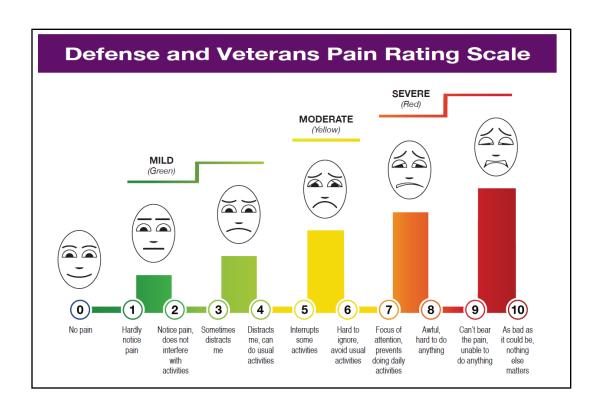
Use alternative formulations first:

- Antidepressants
- Gabapentinoids
- Psychotherapy (CBT, ACT)
 - > Sleep treatment
 - Sleep deprivation shown to increase pain perception
- Physiotherapy



26

Veehof et al. (2011,2016): Taylor et al. (2007): Reinecke et al. (2015)



Highlights

- 1. Chronic opioids are now recognized to deliver limited benefits and confer numerous risks
- Psych factors contribute to experience of pain, medication seeking, and dependence
- 3. Numerous options for managing chronic pain, with little to no risk of harm



DIAGNOSIS OF OPIOID USE DISORDER



DSM-5 Criteria for SUD Diagnosis

"A problematic pattern of drug use leading to clinically significant impairment or distress, as manifested by at least 2 of 11 symptoms occurring within a 12-month period."

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American Psychiatric Association (2013)

DSM	<u> M-5 Criteria</u>
	Use of larger amounts/over longer time than intended
Imposited Control	Desire/unsuccessful efforts to cut down or control use
Impaired Control	Much time spent trying to obtain, using, recovering from effects
	Experience strong desires, urges, or cravings
	Results in failure to fulfill major obligations at work, school, or home
Social Impairment	Continued use despite causing or exacerbating persistent or recurrent social/interpersonal problems
	Important social, occupational, or recreational activities are given up/reduced
	Recurrent use in physically hazardous situations
Risky Use	Continued use despite knowing it likely causes or worsens physical or psychological problems
Pharmacological	Use greater amounts to achieve intoxication or desired effect, or affected less by same amount
Criteria	Experience withdrawal symptoms or use to relieve or avoid withdrawal symptoms
American Psychiatric	Association (2013) Uniformed Services University 31

Dependence does not = Addiction

Dependence

Physical dependence on an opioid means cessation of the opioid results in withdrawal

• Physical dependency on opioids is expected in all individuals in the presence of continuous use



Symptoms of Opioid Withdrawal

Dilated pupils (small pupils when high)

Anxiety

Nausea, vomiting

Abdominal pain

Sweating

Aches

*Non-life threatening



https://medlineplus.gov/ency/article/000949.htm

Case Example

- 40 yr old OEF/OIF Vet w/ chronic lower back pain
- Served in airborne corps
 - > Lumbar disc degeneration
 - ➤ Never saw combat
- Obese
- Never fully engaged in physiotherapy
- On Oxycontin for 10 years
 - > Dose steadily increased by physician
 - > Continues to experience pain
 - > Has always taken as prescribed
 - ➤ Open to recent recommendation to reduce Oxycontin *slowly* and try alternative approaches
- No history of alcohol or drug abuse
- Dysthymic



Case Example

- 40 yr old OEF/OIF Vet w/ chronic lower back pain
- Served in airborne corps
 - > Lumbar disc degeneration
 - ➤ Witnessed best friend step on IED
- Obese
- Never fully engaged in physiotherapy
- On Oxycontin for 10 years
 - > Has multiple prescribers
 - > Continues to experience pain and always says the dose is not enough
 - > Often "runs out early" and calls for more medication
 - ➤ Aggressively rejects recommendation to reduce Oxycontin *slowly* and denies alternative approaches
- History of alcohol abuse
- Major depressive disorder
- Possible PTSD, has not been formally assessed



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SCREENING FOR OPIOID USE DISORDER



Assessing Use and Identifying an OUD

- 1. Clinical Interview
- 2. Screening Measures
- 3. Monitor prescriptions via state/federal drug monitoring programs
- 4. Regularly assess patient use with query & taking drug levels



Assessing for Aberrant Use of Opioids

- Running out of meds early
- Missing or lost prescriptions
- Sharing meds with others
- Selling meds to help finances
- Using meds not as prescribed



Opioid Use Screening Tools

- Alcohol, Smoking, & Substance Involvement Screening Test (ASSIST V3.0)
- 2. Screener and Opioid Assessment for Patients with Pain (SOAPP/SOAPP-R)
- 3. Opioid Risk Tool (ORT)



Butler et al., (2004, 2008, 2009); Humeniuke et al. (2008); Webster et al. (2005)

Assist v3

Question 1

(if completing follow-up please cross check the patient's answers with the answers given for Q1 at baseline. Any differences on this question should be queried)

In your life, which of the following substances have you ever used? (NON-MEDICAL USE ONLY)	No	Yes
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3
d. Cocaine (coke, crack, etc.)	0	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3
j. Other - specify:	0	3



In the <u>past three months</u> , how often have you used the substances you mentioned (FIRST DRUG, SECOND DRUG, ETC)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
d. Cocaine (coke, crack, etc.)	0	2	3	4	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	2	3	4	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	2	3	4	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	2	3	4	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	2	3	4	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	2	3	4	6
j. Other - specify:	0	2	3	4	6

If "Never" to all items in Question 2, skip to Question 6.

If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for <u>each substance</u> used.



Remaining Qs

Past 3 months:

Q3: how often have you had a strong desire to use?

Q4: how often has your use led to health, social, legal, or financial problems?

Q5: how often have you failed to do what was normally expected of you because of use?

Ever:

Q6: has a friend or anyone else <u>ever</u> expressed concern about your use? (no; yes but not in past 3 months; yes in past 3 months)

Q7: Have you ever tried and failed to control, cut down or stop using (no; yes but not in past 3 months; yes in past 3 months) ${
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Q2c + Q3c + Q4c + Q5c + Q6c + Q7c

THE TYPE OF INTERVENTION IS DETERMINED BY THE PATIENT'S SPECIFIC SUBSTANCE INVOLVEMENT SCORE

	Record specific	no intervention	receive brief	more intensive
	substance score		intervention	treatment *
a. tobacco		0 - 3	4 - 26	27+
b. alcohol	15	0 - 10	11 - 26	27+
c. cannabis		0 - 3	4 - 26	27+
d. cocaine		0 - 3	4 - 26	27+
e. amphetamine		0 - 3	4 - 26	27+
f. inhalants		0 - 3	4 - 26	27+
g. sedatives		0 - 3	4 - 26	27+
h. hallucinogens	3	0 - 3	4 - 26	27+
i. opioids	30	0 - 3	4 - 26	27+
j. other drugs		0 - 3	4 - 26	27+



Name:	ne: Date:		Good measure if you anticipate deception	
The following are some questions given to all patients at the Pain Management Center who are on or being considered for opioids for their pain. Please answer each question as honestly as possible. This information is for our records and will remain confidential. Your answers alone will not determine your treatment. Thank you. Please answer the questions below using the following scale: 0 = Never, 1 = Seldom, 2 = Sometimes, 3 = Often, 4 = Very Often			≥ 4 means: > 52% chance they have Opioid Use Disorder > 48% chance they do not	
1. How often do you have mo	od swings?	0 1 2 3 4	< 4 means: > 20% chance they have	
How often do you smoke a you wake up?	cigarette within an hour after	0 1 2 3 4	Opioid Use Disorder Meaning they are probably low risk	
How often have you taken a was prescribed?	medication other than the way that it	0 1 2 3 4		
How often have you used il marijuana, cocaine, etc.) i		0 1 2 3 4		
5. How often, in your lifetime been arrested?	, have you had legal problems or	0 1 2 3 4	CDP	

Electronic Medical Records (EMR)

Integrated care can typically look through records as relevant

Prescription drug monitoring programs
https://crisphealth.org/services/prescription-drug-monitoring-program-pdmp/pdmp-registration/

*Release of information with prescribing physician



. . .

When to Refer to Specialty Care

- Evidence of misuse from screening and/or EMR
- Unsuccessful efforts to change use
- Prior diagnosis/treatment & continued use
- Incident with substance involvement
- Medical stabilization is needed
- Ready to change



IOM (2013); Management of Substance Use Disorders Working Group (2009

TREATMENT FOR OPIOID USE DISORDER



"Opioid use disorder is a chronic, relapsing illness"

Nora Volkow, MD, Director of National Institutes of Drug Abuse &

Francis Collins, MD, Director of National Institutes of Health

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Volkow & Collins (2017) NEJM

Medication Assisted Treatments (MATs)

- Buprenorphine partial opioid agonist
- Methadone opioid agonist
- Less effective: Naltrexone opioid antagonist
 - Sold as monthly injection (~\$1300)
 - Some evidence for injection but expensive, and adherence is an issue

Overdose prevention:

- Overdose occurs when neurons that control breathing are suppressed
 - Naloxone reverses this
- Sold as nasal spray Narcan to reverse an overdose
- Often combined with buprenorphine and sold as suboxone



Lee (2016); Hser (2016); https://www.samhsa.gov/medication-assisted-treatment/treatment

Question

- Why give an individual with an opioid use disorder an opioid agonist?
 - All agonists are not created equal:
 - Fentanyl and carfentanil often in street drugs are 50 and 5000 times as potent as heroin, respectively.
 - Users can't get high on buprenorphine or suboxone, and not really on controlled methadone doses.
 - Reduces risk for:
 - Overdose
 - Adulterants
 - Escalating use
 - Diseases from needles
 - Can maintain on agonist, or can taper off slowly and safely.

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50

Nolan et al. (2014); Woody et al. (2014)

Treatment Data

- 2016 review:
 - Remains <u>unclear if behavioral treatment adds additional benefit</u> to MATs for opioid use disorder
 - However, MATs often involved weekly or biweekly check in
- Prescription Opioid Addiction Treatment Study (POATS; N = 653):
 - Largest study to date
 - Suboxone + weekly medical management was effective
 - Maintaining on suboxone led to way better outcomes than tapering off
 - Adding counseling did not improve outcomes



Carroll & Weiss (2016); Weiss & Rao (2017)

MUST REFER to MAT Program!

- Despite strong evidence, only 34% of patients receive MATs
- In the VA, only 27% of Vets with opioid use disorder receive MATs





Knudsen et al. (2011): Oliva et al. (2013



What role does therapy have?

- Meta-analysis of psychosocial interventions (e.g., CBT, skills training):
 - Reduces sharing of needles and other paraphernalia above education and HIV testing/counseling
- There is <u>plenty of evidence</u> that psychotherapy is effective for comorbid conditions, including chronic pain
- Less studies of therapy for opioid use disorder than for other substances (e.g., alcohol, tobacco), however..
 - Strong evidence supports therapies for other substances, therefore likely is an effect of therapy for some people
 - Federal law that MAT patients receive therapy



Gilchrist et al. (2017); Heckman et al., (2010); Magill et al., (2009)

Case Example

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55

GUIDELINES AND TREATMENT:
MY CLIENT HAS AN OPIOID USE
DISORDER, NOW WHAT?



SBIRT: Screening, Brief Intervention, Referral to Treatment

- 1. If substance use suspected, provide screening
 - 2. Express concern that the patient is using at unhealthy levels
- **B** 3. Give <u>feedback</u> linking substance use to medical, social, or mental health consequences
 - Where relevant, personalize feedback to patient's specific conditions (e.g., depression, PTSD, insomnia, chronic pain)
 - 4. Support the patient in <u>choosing a goal</u> if he/she is ready to make a change
 - 5. Offer referral to specialty SUD care (including MAT)
- **T** 6. Repeat as necessary

Babor (2007); Madras (2009)



57

Brief Interventions

<u>Primary Goal</u>: Transition to MATs, get substance use below risk levels

<u>Primary Focus</u>: Apply motivational interviewing to increase motivation to change by weighing the pros and cons of the substance use

<u>Intervention Time Varies</u>: 5-min discussion with a health care practitioner, one or a few outpatient sessions

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VA/DoD Management of Substance Use Disorders CPG, (2015)

What is Motivational Interviewing?

- Communication skills that are motivational rather than judgmental
- Use techniques to help the client explore their values and reasons for change
 - Begin with: "Do you mind if we talk about your opioid use? What are some pros and cons of opioids for you?" instead of "Your opioid use is problematic, you need to stop."
- Designed to help patients explore their ambivalence about changing

Miller & Rollnick (2012)

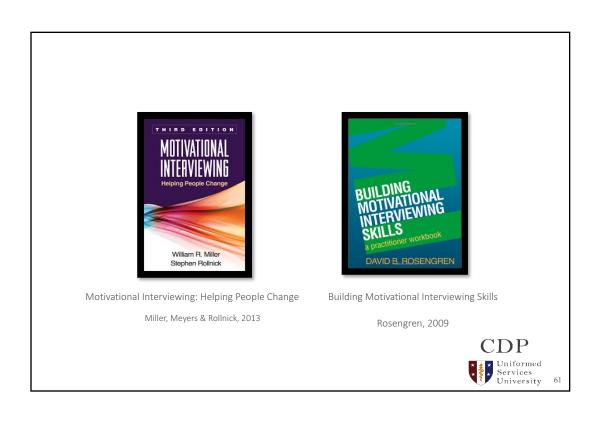
Lundahl et al (2010)

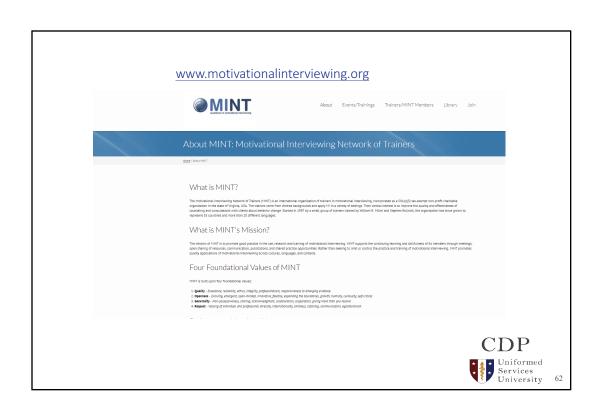
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Benefits of Using a Motivational Interviewing Approach

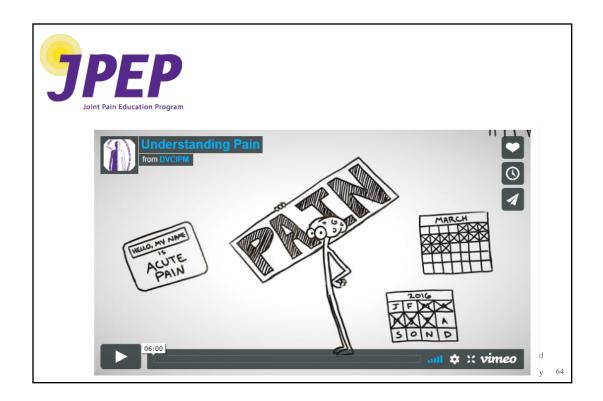
- Increased compliance treatment recommendations
- Improved outcomes
- Greater patient satisfaction











Highlights

- 1. Opioid use disorder is highly comorbid
- 2. MATs are essential to stabilizing and/or tapering of opioids
- 3. Counseling can *possibly* help some patients directly through evidence based approaches
- 4. Counseling can *definitely* help many patients indirectly through treatment of comorbid conditions



65

DOD AND VA
SUBSTANCE ABUSE
PROGRAMS



DoD Programs

- Army: Army Substance Abuse Program (ASAP)
- Navy/Marine Corps: Substance Abuse Rehabilitation Program (SARP)
- Air Force: Alcohol and Drug Abuse Prevention and Treatment (ADAPT)











VA Programs

- VA Substance Abuse Residential Rehabilitation Treatment Programs (SARRTP)
 - 28-Day Intensive Inpatient Program
 - 6-month Domiciliary Program
 - Intensive Outpatient Day Program
- Community Transitional Living Options (usually supported for up to 24-months):
 - Halfway House/Oxford House
 - Transitional Living Facility



Aspects of DoD Programs

- Command notification
- Limited protection for self-disclosure of opioid use disorder
- Drug use disorder diagnoses result in initiation of separation proceedings and possible enrollment in treatment



CDP Website: deploymentpsych.org

- Descriptions and schedules of upcoming training events
- Blog updated daily with a range of relevant content
- Articles by subject matter experts related to deployment psychology, including PTSD, mTBI, depression, and insomnia
- Other resources and information for behavioral health providers
- Links to CDP's Facebook page and Twitter feed





Online Learning

http://www.deploymentpsych.org/content/online-courses

NOTE: All of these courses can be taken for free, or for CE Credits for a fee

- Cognitive Processing Therapy (CPT) for PTSD in Veterans and Military Personnel (1.25 CEs)
- Prolonged Exposure Therapy for PTSD in Veterans and Military Personnel (1.25 CEs)
- Epidemiology of PTSD in Veterans: Working with Service Members and Veterans with PTSD (1.5 CEs)
- Provider Resiliency and Self-Care: An Ethical Issue (1 CEs)
- Military Cultural Competence (1.25 CEs)

- The Impact of Deployment and Combat Stress on Families and Children, Pt 1 (2.25 CEs)
- The Impact of Deployment and Combat Stress on Families and Children, Part 2 (1.75 CEs)
- The Fundamentals of Traumatic Brain Injury (TBI) (1.5 CEs)
- Identification, Prevention, & Treatment of Suicidal Behavior in Service Members & Veterans (2.25 CEs)
- Depression in Service Members and Veterans (1.25 CEs)

All of these courses and several others are contained in the Serving Our Veterans Behavioral Health Certificate program, which also includes 20+ hours of Continuing Education Credits for \$350.



71

Provider Support

CDP's "Provider Portal" is exclusively for individuals trained by CDP in evidence-based psychotherapies (e.g., CPT, PE, and CBT-I)

- Consultation message boards
- · Hosted consultation calls
- Printable fact sheets, manuals, handouts, and other materials
- FAQs and 1:1 interaction with answers from SMEs
- Videos, webinars, and other multimedia training aids



Participants in CDP's evidence-based training will automatically receive an email instructing them how to activate their user name and access the "Provider Portal" section at Deploymentpsych.org.



Center for Deployment Psychology

Department of Medical & Clinical Psychology
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road, Executive Office: Bldg. 11300-602
Bethesda, MD 20813-4768

Contact Us

Email: General@DeploymentPsych.org

Website: DeploymentPsych.org

Facebook: http://www.facebook.com/DeploymentPsych

Twitter: @DeploymentPsych

