Initial Results from a Study of MAT in a Twelve Step Model Treatment System

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The Opioid Crisis: Context

20 year old female

As a high school sophomore she was on the honor role, played sports and was a wonderful daughter. That year she had a knee injury in soccer and was placed on oxycodone. Escalation of use ensued, then behavioral changes and within 6 months decreased school performance. She didn’t return to sports as a junior and dropped out as a senior. Heroin use began, she had 4 episodes of treatment for addiction, and 6 overdoses. She died of an overdose at 20, four days after leaving a treatment program.
Today’s Talk

• The opioid crisis in four slides

• How Hazelden Betty Ford changed treatment to improve results for those with opioid use disorders: COR-12

• COR-12 Research Study results
Annual Numbers of New Nonmedical Users of Psychotherapeutics: 1965-2000

2001 National Household Survey on Drug Abuse
http://www.oas.samhsa.gov/NHSDA/2k1NHSDA/vol1/toc.htm#v1
Rates* of opioid pain reliever (OPR) overdose death, OPR treatment admissions, and kilograms of OPR sold: United States, 1999-2010

* Age-adjusted rates per 100,000 population for OPR deaths, crude rates per 10,000 population for OPR abuse treatment admissions, and crude rates per 10,000 population for kilograms of OPR sold.

www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm
The First Count of Fentanyl Deaths in 2016: Up 540% in Three Years

Drugs Involved in U.S. Overdose Deaths, 2000 to 2016

https://nyti.ms/2xF4O3I

Note: Data for 2016 is provisional

5,000 deaths per year

20,100 Fentanyl & fentanyl analogues
15,400 Heroin
14,400 Prescription opioids
10,000 Cocaine
7,660 Meth.
3,280 Methadone
Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one’s behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.
Treatment of Addiction

- Psychological: Psychotherapies (CBT, MET...)
- Social/Spiritual: 12 Step facilitation and attendance
- Biological: Medications
- Combining evidence based practices
How Well Does Addiction Treatment Work

Relapse Rates Are Similar for Drug Dependence and Other Chronic Illnesses

High Risk Population

• Those who are addicted to opioids are highly vulnerable, at-risk patients

They are:

• More likely to leave treatment before it is completed

• Hypersensitive to physical and psychic pain, putting them at higher risk of relapse
  (Silverman, 2009).

• At higher risk of death from accidental overdose during relapse
  (Comish et al., 2010)
Comprehensive Opioid Response with the Twelve Steps (COR-12)

• A Response to Crisis

• An Attempt to Engage Patients in Long Term Recovery

• A Combination of Evidence Based Practices
Comprehensive Opioid Response with the Twelve Steps which is extended, adjunctive use of medications – in combination with psychological and psychiatric care, Twelve Step based counseling and other evidence based therapies – to increase the potential for those who have the disease of addiction to achieve long-term recovery.
The Hazelden Betty Ford Experience Prior to COR-12

- Increased admissions for opioid use disorders
- Problems with treatment retention
  - Significant rate of early discharge
  - Risk to patient → Nearly all patients that leave without completing treatment relapse
- Unit milieu issues
- Use of opioids during treatment
- Increased incidence of death following treatment
  - Ethical imperative to evaluate the treatment model.
Organizational Change Process

• Team Established
• Literature Review
• White Paper
• Plan for Organization
• Training Forums
• Communication
Compatibility with 12-Step Abstinence-based Model

- Naltrexone, which doesn’t cause intoxication, is usually acceptable
- Buprenorphine/naloxone can induce intoxication and is misused, but primarily for detox or to get by when other opioids are not available
- Twelve Step model treatment programs tend to avoid use of buprenorphine.
- Our goal will be discontinuation once long-term recovery is well established (some people will never accomplish this, but still gain from medication)
Our Experience

- Opioid support group
- Patient engagement
- Long term approach
- Abstinence
- Staff bias and passion
- Medications
• COR-12 Outcomes at 6 months

• Submitted for publication
Research shows that Medications for Opioid Use Disorders (MAT) can be effective

**Background**

- **Most studies are RCTs (Randomly Controlled Trials)**
  - Typical finding: patients who receive either buprenorphine or naltrexone do better than placebo (no meds) patients in treatment engagement and opioid use
  - Most studies use minimal individual and group counseling as the psychosocial component

- **Our study: not an RCT**
  - Naturalistic observation of clinical practice
  - Clinical practice drives care decisions, the research follows
Unexplored questions related to Medications for Treatment of Opioid Use Disorders (OUD)

Background

• Is the use of OUD medications (especially buprenorphine) acceptable and feasible in patients receiving 12-step, abstinence-based treatment? No data.

• What types of outcomes are seen when medications are used with 12-step treatment? How do patients taking the medications compare to patients who don’t take meds? Limited data.

• Do patients who take meds over a longer period of time comply with them?
COR-12 research study

Who participated?

• 259 OUD patients attending Center City residential from June 2013 – June 2017

• All patients had an ICD dx of opioid dependence/opioid use disorder

  58% heroin
  30% oxycodone
  12% other
Participant information

- 68% male
- Mean age: 30 years; 69% were 30 years or younger
- 48% had an AUD
- 21% had 3 or more SUDs besides OUD
- 90% had at least 1 MH disorder
- 20% had >=3 past SUD treatment episodes
- 34% buprenorphine, 35% naltrexone, 31% no meds
- Severity consistent with other studies
Treatment completion: residential

92% successfully completed treatment

% of COR-12 study participants completing residential treatment by med condition

- buprenorphine: 93%
- naltrexone: 95%
- no meds: 94%
Step down program engagement

73% stepped down to another HBFF program

% of COR-12 patients who stepped down to another Hazelden Betty Ford program

These groups significantly differ at p<.05
Medication compliance after residential treatment

- At 1 month, 89% of buprenorphine patients reported complying with their meds, and 78% of naltrexone patients

- At 6 months, compliance rates were 72% for buprenorphine and 47% for naltrexone (p = .01)

- We examined abstinence and opioid craving as a function of med compliance...
Average craving rating for opioid DOC 6 mos after residential treatment as a function of med compliance

- Bupren compliant: 2.24
- Bup noncompliant: 3.07
- Nalt compliant: 1.55
- Nalt noncompliant: 3.08
- No meds: 2.00
Continuous abstinence at 6 months post-residential as a function of med compliance
Important results

• Patient engagement with COR-12 programming is very high
• MAT is feasible in our 12 step setting (almost 2/3 went on meds and most reported taking them after treatment)
• Outcomes very strong overall, even for the no meds group
• Outcomes were strongly related to medication compliance
Current Focus

• Engagement: Improve numbers sustaining long term outpatient care
• Improve compliance with medications
• Family involvement
• Re-training staff
• Overdose prevention: naloxone
• Research project: youth
Summary

• The severity of the opioid crisis requires we use everything at our disposal, independent of personal bias, to help those with opioid use disorders.

• We have successfully integrated a robust 12 Step treatment focus, psychotherapies and medications to improve outcomes.
"I think you should be more explicit here in step two."