Medication Assisted Therapy (MAT) in New Mexico

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Public Health Impact of Opiate Addiction in NM

• Estimated 23,000 IV drug users – mostly heroin
• In 2005 had second highest drug-induced death rate in US – 20.9 deaths/100,000 vs. US rate of 11.2/100,000.
• Two NM counties were among top 25 in nation for drug-induced poisoning deaths
• 32,000 on hepatitis C registry
HIV, HBV, and HCV Among Injection Drug Users in New Mexico 1994 - 1997

Samuel MC, Doherty PM, Bulterys M, Jenison SA
Epidemiol. Infect. 2001 Dec;127(3):475-84
Prevalent HIV/AIDS by Mode of Exposure, New Mexico, 2007

- MSM: 62%
- IDU: 10%
- MSM/IDU: 10%
- Other: 1%
- Hetero: 9%
- NIR: 8%

Source: NMDOH, HIV & Hepatitis Epidemiology Program; Mar 2008.
Incidence of HIV/AIDS by Mode of Exposure, New Mexico, 1998-2007*
Drug Induced Deaths by Year
for New Mexico and the United States
(Per 100,000)
<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2005-2007 Drug Induced Death Rate Per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>17.0</td>
</tr>
<tr>
<td>American Indian</td>
<td>9.5</td>
</tr>
<tr>
<td>Asian/Pacific Islanders</td>
<td>* 5.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>25.1</td>
</tr>
<tr>
<td>White</td>
<td>19.6</td>
</tr>
</tbody>
</table>
2005-2007
Unintentional Drug Poisoning Death Rates
by New Mexico County (Per 100,000)

* Less than 4 deaths in the county over 3 years;
  there were no deaths in Harding County.

NOTE: Rates are age-adjusted to the 2000 US Standard Population.
SOURCE: The New Mexico Office of the Medical Investigator.
What is addiction?

- A term referring to compulsive drug use, psychological dependence, and continuing use despite harm.
- *Addiction is frequently and incorrectly equated with physical dependence and withdrawal.* Physical dependence, not addiction, is an expected result of opioid use.

Addiction to heroin is a chronic, relapsing disease with high morbidity and mortality

- 33 year follow up of 581 male heroin addicts in Los Angeles found:
  - Nearly half had died
  - 20.7% of those living tested positive for heroin
  - 40% reported using heroin in past year
  - High rates of disability, hepatitis, mental health disorders, and criminal activity
  - Fewer than 10% were in methadone maintenance Rx.

A single male heroin addict costs the taxpayer $2.1 million over 11 years in court costs, jail time, ER visits, hospital care, ambulances, etc.

-SAMHSA
NIH Consensus Statement 1997

• “Whatever conditions may lead to opiate exposure, opiate dependence is a brain-related disorder with the requisite characteristics of a medical illness.”

The Medical Standard of Care for Treatment of Opiate Addiction is:
Opioid Replacement Therapy (ORT) or
Medication Assisted Therapy (MAT)

Two medications currently available:
Methadone
Buprenorphine
Medication Assisted Therapy (MAT)

The primary goal of MAT is to reduce illegal heroin use and the crime, diseases and deaths associated with heroin addiction.
Medication Assisted Therapy

- A medical model for the treatment of opiate dependence.
- Treats opioid dependence as a chronic, relapsing disease.
- The substitution of an opiate-like medication to prevent withdrawal and minimize craving for opiates.
- Effective medications – methadone or buprenorphine
opiate receptor

opiate
Functions of Drugs at \textit{mu} Receptor

**Full agonists:**

- Occupy the receptor and activate that receptor
- Increasing doses of the drug produce increasing receptor-specific effects until a maximum or toxic effect is achieved
- Most abused opioids are full agonists
Functions of Drugs at mu Receptor

Partial agonists:

• Bind to and activate receptor
• Increasing dose *does not* produce as great an effect as does increasing the dose of a full agonist (less of a maximal effect is possible)
Intrinsic Activity: Full Agonist (methadone), Partial Agonist (buprenorphine), Antagonist (naloxone)

Log Dose of Opioid

Full Agonist (methadone)
Partial Agonist (buprenorphine)
Antagonist (naloxone)

Intrinsic Activity
Analgesia
Death
NIH Consensus Statement 1997

• “The safety and efficacy of narcotic agonist (methadone) maintenance treatment has been unequivocally established.”

How is methadone prescribed?

• Best outcomes achieved when patients are maintained for long periods of time (at least one year) on high doses (80 to 120 mg daily) of methadone.
• A low dose of methadone will prevent withdrawal symptoms.
• Higher doses are needed to minimize craving for opiates.
Methadone IS effective

• After 1 year, 60% reduction in drug use
• After 2 years, 85%
• 70% reduction in crime within 4 months
  • Ball and Ross 1991

• Decreased transmission of blood-borne diseases
• Less HIV infection: 5% seroconversion in treated versus 26% non-treatment group
  – Metzger 1993
Methadone Regulation

- Can only be dispensed by licensed methadone maintenance programs
- Must follow federal and state regs
- Requires daily dispensing (six days a week) for first six months
- Eventually may receive 30 day supply
Doesn’t MAT simply replace one addiction with another?
# Pharmacologic Properties of Heroin and Methadone

<table>
<thead>
<tr>
<th></th>
<th>Heroin</th>
<th>Methadone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onset of action</strong></td>
<td>Immediate</td>
<td>30 minutes</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>4 to 6 hours</td>
<td>24 to 36 hours</td>
</tr>
<tr>
<td><strong>Route of administration</strong></td>
<td>Injection, Snorting, or Smoking</td>
<td>Oral</td>
</tr>
</tbody>
</table>
Buprenorphine

- Partial agonist - safer than methadone (less overdose potential)
- Combined with naloxone (Narcan) as "Suboxone"
  - causes withdrawal if injected when other opiates are present
  - decreases value as street drug
  - naloxone not active when taken by sublingual route
Buprenorphine a New Medication for Treating Opiate Addiction

- Recognized as potential addiction treatment by NIDA researchers in 1970s.
- NIDA created Medications Development Division to focus on developing drug treatments for addiction, 1990.
- NIDA formed an agreement with the original developer to bring buprenorphine to market in the U.S., 1994.
- Buprenorphine tablets approved by the FDA, 2002.
Drug Addiction Treatment Act of 2000 allows qualified physicians to prescribe Schedule III-V drugs for treatment of opiate dependence (Buprenorphine is Schedule III)

Registered physicians can treat up to 30 opiate dependent patients at one time with buprenorphine

After one year can be increased to 100
NIH Consensus Statement 1997

• “Although a drug-free state represents an optimal treatment goal, research has demonstrated that this goal cannot be achieved or sustained by the majority of opiate-dependent people.”

“Principles of Drug Abuse Treatment for Criminal Justice Populations”

“Medicines such as methadone and buprenorphine for heroin addiction have been shown to help normalize brain function, and should be made available to individuals who could benefit from them.”

National Institute of Drug Abuse  July 2006
Methadone and buprenorphine are the “nicotine patches” of heroin addiction treatment.
NIH Consensus Statement

“Non-pharmacologic supportive services are pivotal to successful MMT... Co-morbid psychiatric disorders require treatment... and other psychological therapies enhance program retention and positive outcome.”
Incarcerated Americans
1920 - 2006

Treating Drug Abuse and Addiction in the Criminal Justice System

*Improving Public Health and Safety*

- “Punishment alone is a futile and ineffective response to drug abuse, failing as a public safety intervention for offenders whose criminal behavior is directly related to drug use.”

JAMA, January 14, 2009 – Vol 301, No.2
The dashed line represents the adjusted mortality rate for residents of the State of Washington (223 deaths per 100,000 person-years), and the solid line represents the crude mortality rate among inmates of the state prison system during incarceration (201 deaths per 100,000 inmate person-years).
NIH Consensus Statement 1997

“All opiate-dependent persons under legal supervision should have access to methadone maintenance therapy…”

Bernalillo County Metropolitan Detention Center (MDC)

- Joint operation of Albuquerque and Bernalillo County governments
- Opened June, 2003
- Construction cost: $100 million
- Annual budget: $60 million
- 35th largest jail in U.S.
- Current capacity - 2400
- 40,000 bookings/year
  - > 20% with 2 or more admissions
  - 60% leave within 72 hours
  - Average length of stay: 90 days
Heroin Use By BCDC Arrestees, 2002

Males: 9.8
Females: 16.4
3,000 opiate detoxifications per year
Why Should Methadone Maintenance at MDC?

- Discontinued at MDC in 1997 – except in pregnancy
- High relapse rate after release from jail
- Involuntary detox (“cold turkey”) is inhumane, potentially dangerous and costly
- May decrease drug seeking behaviors and high risk use in jail
- Risk of overdoses in jail and after release
- Fear of detox in jail discourages some users from entering methadone treatment
MDC Methadone Maintenance Treatment (MMT) Program

- Started November 2005
- Voluntary “courtesy dosing” by private contractor for those currently enrolled in MMT and pregnant women
- No charge; public funding ($200K)
- 40 to 60 doses/day
- Almost 2000 enrolled by end 2008
- Follow up shows that most return to community clinic after release
MAT in Corrections

• 1- For Rx of opiate withdrawal syndrome (detox)
• 2- Initiation of MAT treatment and maintenance during incarceration
• 3- Maintenance for those enrolled in MAT in community
• 4- Referral at time of release to MAT provider in community
• 5- Pre-release induction of MAT with referral to community provider
• 6- Methadone maintenance for pregnant women
Untreated Heroin Dependency has the highest Recidivism rate for women at NM Women’s Correctional Facility in Grants

Recidivism Rate

No Substance Abuse
Alcoholic Only
Other Addict*
Cocaine Addict*
Heroin Addict*

Time (months)

Senate Joint Memorial 29 study from 1997-2000
By Pam Brown, MPH
Department of Health Jail-linked Suboxone Induction Program
Albuquerque, NM

- Started November 2008
- Uninsured heroin injecting drug users
- Priority populations:
  - persons recently released from MDC
    (jail recruitment video pending)
  - participants in Syringe Exchange Program
- Provides two months free Suboxone
- Clients enrolled in public insurance program
- >90 inductions – 15 recently released from MDC
Department of Health Jail-linked Suboxone Induction Program

• Referrals for case management and counseling
• Weekly support group
• Public health clinical services: harm reduction (SEP and naloxone), STDs, family planning, TB, hepatitis, immunizations
• Referral to PCP for continuation of office-based treatment
• $90,000 budget for medication
• Program staff: 0.5 FTE PA on contract, 3 MDs to prescribe
Albuquerque Healthcare for the Homeless  REC Grant

– $2 million CSAT grant to link 100 recently released inmates/year X 5
– Pays for one year of buprenorphine maintenance in primary care setting
– Case management and other psychosocial support services
Buprenorphine for Detox in Las Cruces, NM

• Las Cruces, NM public health program
  – Provides free Suboxone for opiate dependent persons
  – Uses Suboxone for opiate withdrawal in jail – funded by county government
  – Referrals to Dept. of Health for continuation of Rx after release
Taking it to the next level: Bernalillo County Buprenorphine Collaborative Project

- Jail Administration
- ECHO Project – UNM Health Sciences Center – RWJ Grant Recipient
- Albuquerque Healthcare for the Homeless
- First Choice Community Clinics (FQHC)
- Community Oriented Correctional Health Services (COCHS) –Oakland, CA (RWJ Grantee)
- NM Department of Health
- Bernalillo County Commission - $600K pledged
MAT in New Mexico

• “Memorial” passed by state legislature directs DOH to convene multi-agency task force to present a plan for increasing access to Rx
The New Mexico Harm Reduction Act (1997)

The NM Dept. of Health shall:

• Establish and administer a harm reduction program for the purpose of sterile hypodermic syringe and needle exchange.

• Compile data to assist in planning and evaluation efforts to combat the spread of blood-borne diseases.

This statute makes access to clean injection equipment a right rather than a privilege in New Mexico.
What is Harm Reduction?

- A set of practical and humane strategies aimed at reducing the negative consequences of drug use
- Includes a spectrum of interventions ranging from safer use, to managed use, to abstinence
- Attempts to address conditions of use along with use itself
  - From the Harm Reduction Coalition
NMDOH Harm Reduction Program Goals

- To reduce the transmission of blood borne infections including hepatitis & HIV, to limit the frequency of physical injury from abscesses & vein damage, and to minimize other diseases such as endocarditis & septicemia.

- To educate participants on ways to reduce the potential for harm associated with their substance use and other high-risk activities.

- To facilitate access to other health-related services including traditional preventive and primary medical care, as well as alternative healthcare resources.
To act as a conduit for referring participants to substance use treatment when requested.

To facilitate referrals to behavioral health and other social services such as housing, benefits programs, and other supportive services.

To work as advocates for persons using drugs. Offer emotional support and be a resource for participants within the parameters of providing services.

To improve overall individual, family, and community wellness.
New Mexico Harm Reduction Program Achievements

- Since 1998, over 12 million syringes collected and disbursed to >12,000 individuals.
- 12 contractors and 45 Public Health Offices providing harm reduction services.
- Since 2001, 3420 individuals trained in overdose prevention and naloxone.
- 996 opiate overdoses reported reversed.
Naloxone (Narcan) is

- A specific rapidly acting antidote to opiate overdose
- No abuse potential
- Effective when administered intramuscularly, intravenously, subcutaneously and by nasal mist
- Has no adverse effects when administered in situation where opiate overdose is not present
- Prescription drug, but is not a Scheduled drug
Providing naloxone to IDUs in NM

- Participants receive training in recognizing opiate overdose, rescue breathing and naloxone administration
- Dispensed by a licensed clinician with prescribing authority
- Naloxone is prescribed to a specific named individual
New Mexico needs MAT
“treatment on request”
Costs of Opiate Dependence among Incarcerated People

“Methadone costs about $4000 per year while incarceration costs in excess of $20,000 per inmate, per year.”
- Institute of Medicine

• Buprenorphine costs are equivalent to methadone.
Barriers to “T on R”

Suboxone
• Though covered by Salud Medicaid - most not eligible
• Few doctors prescribing
• Long wait lists
• Medicaid requires prior authorization for Rx
• Few MCO providers
• VO does not pay unless prescribed by psychiatrist
• High cost – approx. $12/day
Barriers to “T on R”

Methadone:
• Clinics in only 5 NM cities
• Stigma factor very significant
• Not covered by Medicaid
• Most patients pay out-of-pocket
• VO d/ced Access to Recovery voucher program
• Only MDC continues for those incarcerated
OVERDOSE PREVENTION TRAINING
MON SEPT 22 7:00 PM