In 2003, An Estimated
21.6 Million Americans
Were Dependent On or Abused
Any Illicit Drugs or Alcohol

But...Only 3.3 Million (15%)
of These Individuals
Had Received Some Type of
Treatment In the Past Year



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The Problem: Allure of Immediate Drug Reinforcement



Solution: Methods to Enhance Motivation for Abstinence

- Natural aversive consequences
 - ("hitting bottom")
- Feedback re problems/consequences
 - Confrontation
 - Motivational Enhancement Therapy
- Positive reinforcement for behavior change

History

1960's

Operant
Conditioning
principles
applied in
addiction studie

1970's

Researchers
at
Johns Hopkins
study
Operant
conditioning
principles with
alcohol and
methadone
patients

STITZER

1980's

Researchers at
University of
Vermont study
Contingency
management
principles with
Cocaine &
Crack Patients

HIGGINS

1990's

Magnitude & duration of the incentive program is researched

2000's

Lower-cost incentives are researched

SILVERMAN

PETRY

Contingency management reduces drug use

Opioids(Bickel et al., 1997; Preston et al., 1998)



- Cocaine (Higgins et al., 1991, 1993, 1994; Silverman et al., 1996)
- Benzodiazepines(Stitzer et al., 1992)



Marijuana

(Budney et al., 1991, Budney et al., 2000)

Nicotine

(Stitzer & Bigelow, 1984; Roll et al., 1996)



Positive incentives used in substance abuse treatment

<u>AA</u>

- coffee, food
- group recognition and approval
- > 30-day pins/certificates
- act as sponsor for others

Out-patient treatment

certificates, praise

Methadone maintenance

- take-home doses
- early dosing windows

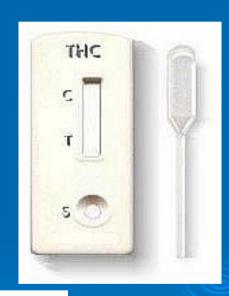
Choice of Reinforcers

- > Food
- Money
- Redeemable Vouchers
- Privileges
- Social Reinforcers verbal praise, attention, physical contact, facial expressions

Challenges to MIEDAR



- Cost of incentives
- On-site testing
- Gambling concerns
- Managing prize cabinet
- Counselor resistance



Abstinence Incentive Costs

Mean cost per patient \$119

Mean cost/pt/day \$1.42

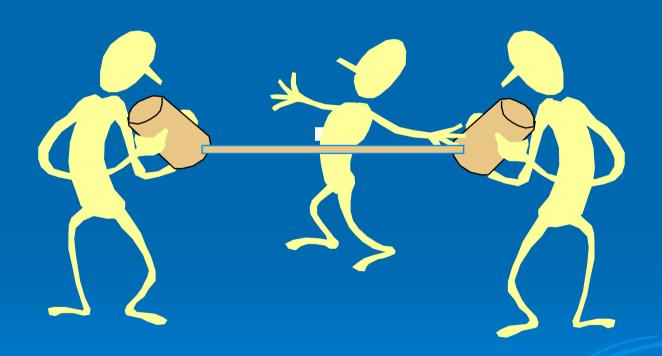




IMPACT OF MIEDAR ON LMG

- > PHILOSPHY OF CHANGE SHIFT
 - -TC
 - -methadone
 - -parole
 - -drug court
 - -family program
 - Staff retention (Ct Renaissance)

How low can we go?



Treatment groups

Cocaine-dependent patients entering intensive day program randomly assigned to:

- 1.) Standard treatment
- 2.) Standard treatment plus \$80 CM

(\$0.33, \$5, and \$100 prizes)



3.) Standard treatment plus \$240 CM

(\$1, \$20, and \$100 prizes)



Mean weeks of continuous cocaine abstinence



Can it work in group settings?



Methadone maintenance clinic



Other ongoing studies:

- > CM in group-based therapy.
- > Vouchers vs prizes in methadone patients.
- CM for chronic recidivist alcoholics (with >4 inpatient detoxes per year).
- CM for abstinence and activity completion (with a focus on medically-related activities) in HIV patients.
- Training therapists to administer CM (for utox results and for group-based attendance).

Future directions

- Continue examining ways to further reduce costs while retaining efficacy (targets of reinforcement, probabilities and magnitudes of reinforcers, use of group format).
- Optimal durations of interventions (differences across populations).
- Maintenance of effects post-treatment.
- Community dissemination.

NATIONAL INSTITUTE ON DRUG ABUSE

National Drug Abuse Treatment Clinical Trials Network

CTN's Mission

To Improve Drug Abuse Treatment
Throughout the Nation...

Using SCIENCE as the Vehicle

National Drug Abuse Treatment Clinical Trials Network And The Addiction Technology Transfer Centers



Dissemination

- What works best ?
- > Under what conditions?
- With what populations?
- > In which programs?
- > What is treatment as usual?
- How do we best transfer science into the treatment field?
- > How much will it cost/save?

SUPERVISION

- Good clinical supervision contributes to better client retention and outcomes
- Good supervision may also contribute to better staff retention (presently studied)
- If possible, it is best to separate an administrative supervisor from a clinical supervisor

Supervision

- Whenever you are stuck or upset with a client, it is always your issue
- There is no such thing as a resistive client, there are only resistive counselors unwilling to pay attention to what their clients need

PHILOSOPHY OF CARE

Would the use of motivational incentives be consistent with the philosophy of care of your agency?

MEET CLIENTS WHERE

THEY ARE AT

>ALWAYS OFFER HOPE AND FAITH

IT IS MORE IMPORTANT TO SHOW THEM HOW MUCH YOU CARE BEFORE YOU SHOW THEM HOW MUCH YOU KNOW

WHATEVER IT TAKES

DIGNITY

and

RESPECT

New, lower cost procedure for group settings.....

Names go in a hat.....

Those whose names are drawn from the hat get to draw from a fishbowl.





In this fishbowl, every slip is a winner!