Naltrexone Maintenance and Opiate Dependence

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Substance Treatment and Research Services (S.T.A.R.S.)

- NIDA-funded, treatment-outcome research programs
- Providing combination of pharmacological and psychotherapeutic interventions for a variety of substance abuse disorders including cocaine, heroin, alcohol and marijuana dependence
- Importance of addressing comorbid psychiatric diagnoses
- Inclusion of adjunct, manual-guided psychotherapy

Clinical Implications of Naltrexone Maintenance

- Naltrexone, when taken regularly, blocks the reinforcing effects of heroin and helps extinguish use of opiates. Further, it is an important alternative to agonist-maintenance and drug-free treatments which, although effective, are limited.
- Problems with naltrexone remain, however, and include:
  1) Difficulty with induction given precipitated withdrawal;
  2) Poor compliance, and;
  3) Relapse is high without adequate psychotherapeutic context (Kosten and Kleber, 1984).
- Efforts to improve compliance with naltrexone are warranted.

Efforts to Improve Treatment with Naltrexone for Opiate Dependence

- The goal of our clinical-research team has been to develop and test a novel behavioral psychotherapy, Behavioral Naltrexone Therapy (BNT)
- Goals of BNT: encourage long-term abstinence from opiates by promoting adherence to naltrexone and lifestyle changes in heroin-dependent individuals.
- BNT integrates several manualized psychotherapy interventions with demonstrated efficacy for substance abusers to promote compliance and retention in treatment, and ultimately reduce relapse rates.

Overview of Behavioral Naltrexone Therapy (BNT):

- Six-month treatment program for heroin dependence and naltrexone maintenance
- Integration of manualized psychotherapy interventions with demonstrated efficacy
- Aims of BNT: abstinence from heroin; adherence to naltrexone; lifestyle changes
- Three Phases of BNT: Induction, Stabilization, and Maintenance
- Twice-weekly therapy sessions: One Individual, One Network
- Network member is trained to monitor medication

BNT: Integration of empirically supported therapy interventions for substance abusers

- Cognitive-Behavioral Relapse Prevention Therapy (Marlatt & Gordon, 1985; Carroll et al., 1994)
- Network Therapy (NT; Galanter, 1993)
- Community Reinforcement Approach (CRA; Hunt & Azrin, 1973; Meyers & Smith, 1995)
- Contingency Management (Higgins et al.1991, 1993, 1994)
- Motivational Enhancement Therapy (Miller & Rollnick, 1991).

What is CBT?

- Behaviors are learned; reinforced by positive/negative consequences
- Learning Theories: Classical Conditioning; Operant Conditioning; Modeling
- Techniques include: self-monitoring or increased attention/awareness to thoughts and behaviors; identifying antecedents/ consequences; re-shaping new behaviors
- Interactive, team-oriented therapy
- Practice exercises in/out of sessions
- Goal-oriented and Time-limited

Relapse Prevention Therapy

- Short-term, Cognitive-Behavioral Approach
- Structured and Goal Oriented
- Flexible, Individualized Approach
- Assumes Drug Use is Learned Behavior
- Coping with Cravings: Increase Awareness/Monitoring of Triggers and Cues

Critical Tasks of RPT:

- Functional Analysis: Exploration of External and Internal Triggers; Pros/Cons of use
- Skills Training (e.g., Cope with Craving; Refusal Skills; Manage Negative Thinking)
- Foster Motivation and Commitment to Stop
- Identify Past/Future High-Risk Situations
- Psychoeducation
- Examine cognitions and affects related to substance use

Goals of RPT

- Recognize
- Avoid
- Cope
  - Self Talk
  - Refusal Skills
  - Decision Delay
  - Talking Through

Network Therapy

- Involves one or more non-drug-using significant others in network
- Review and rehearsal of RPT skills
- Supports integrity of network by improving communication, diffusing interpersonal conflict, and encouraging drug avoidance skills
- Network members participate in weekly sessions, monitor adherence to medication (e.g. naltrexone), and record compliance on monitoring diaries

Community Reinforcement Approach (CRA)

- Intensive goal setting
- Identify and promote competing reinforcers
- Active, collaborative therapy approach
- Use of in-session exercises (e.g., Happiness Scale; Goal Setting; Communication Exercises)
- Importance of Homework/Practice Exercises
- Voucher Program

CRA: Goals of Counseling

- Family/Social Relationships
- Recreational Activities
- Social networks
- Employment
- Psychological
- Legal
- Medical

Contingency Management

- Contingent reinforcement for positive change
- Provides vouchers for positive behaviors (e.g. adherence to medication; abstinence) and awarded to both identified patients and network members/ medication monitors
- Vouchers are reviewed in treatment and exchanged for a variety of goods and services

Motivational Enhancement Therapy

- Encourage internally driven change and self-efficacy
- Precursor to RPT
- Diffuse ambivalence with MET techniques
- Mobilize the patient's resources:

  MET: Why change?

  RPT: How change?

MET Techniques

- **Stages of Change**: Precontemplation; Contemplation; Determination; Action

Techniques:

- Reflection
- Roll with Resistance
- Avoid Argumentation
- Double-Side Reflection

Core Sessions:

Orientation to the Program, Rapport-Building
Functional Analysis of Drug Use
Coping with Cravings (e.g., Self-monitoring)
Managing Thoughts about Drug Use
Problem-Solving Skills
Refusal Skills
Planning for Emergencies
Seemingly Irrelevant Decisions
Building a Supportive Network
Termination

Elective Sessions:

- Social Skills Training
- Relationship Enhancement Training (e.g., Communication Skills)
- Management of Mood and Emotions: Recognition and Management of Anxiety
- Increasing Pleasant Activities
- Enhancing Social Support Networks
- Job-Seeking Skills

Monitoring Integrity of Interventions in BNT

- Rigorous didactic and clinical training
- Weekly individual and group supervision
- Audio- and videotaping of sessions
- Therapist Session Checklist: Measure of Adherence
- Therapist Skillfulness Form: Measure of Competence
- Inter-rater reliability of Therapist Session Checklists by independent evaluator

Three Phases of BNT

- Induction (screening and detoxification)
- Stabilization (Weeks 1-4)
- Maintenance (Weeks 5-24)

Induction Phase:

- Recruitment and assessment of eligibility for BNT
- Detoxification and induction to naltrexone; first two weeks clinic-based administration to ensure compliance
- Transition from inpatient to outpatient treatment
- Additional goals: convening network, providing education and support, securing motivation for treatment and adherence to naltrexone maintenance

Stabilization Phase:

- First month of outpatient treatment
- Focus continues to be securing motivation and commitment to treatment
- Training and rehearsal for network to monitor adherence to naltrexone
- Review of avoidance/relapse-prevention skills to deter immediate slip to heroin use
- Coping with protracted withdrawal symptoms

Maintenance Phase:

- Remaining months of outpatient treatment
- Long-term lifestyle changes are promoted (e.g., Social Skills; Job-Seeking; Relationship Enhancement Skills)
- Termination: facilitate transition for ongoing treatment and naltrexone maintenance beyond six-month program

Management of Slips and Relapses in BNT

- Slips explored as learning experiences
- Review high-risk situations encountered
- Skill-building/emergency plans to prevent future slips
- Elicit support of network
- Promote continuation of medication compliance (return to clinic-based administration)
- Avoid punitive responses

Review of efforts to manage slips and promote compliance in BNT

- With slips, return to clinic-based administration to promote continued compliance and avoid relapse
- Network members closely monitor medication compliance and reinforce treatment efforts
- Confirm compliance with riboflavin markers, blood levels, and recording sheets completed by network
- Voucher rewards for compliance to reinforce behavior

Eligibility for BNT

- ***Inclusion Criteria*:**

  1. ≥18 years of age.

  2. Meets criteria for opiate dependence as measured by SCID-IV criteria, urine toxicology, and naloxone challenge if diagnosis is unclear.

  3. Has a non-substance abusing significant other who is eligible and willing to participate in network therapy.

- ***Exclusion Criteria***:

  1. Unstable medical conditions such as active liver disease.

  2. Diagnosis of Bipolar Mood Disorder or Psychosis.

  3. Suicidality/Homicidality.

  4. Regular methadone use.

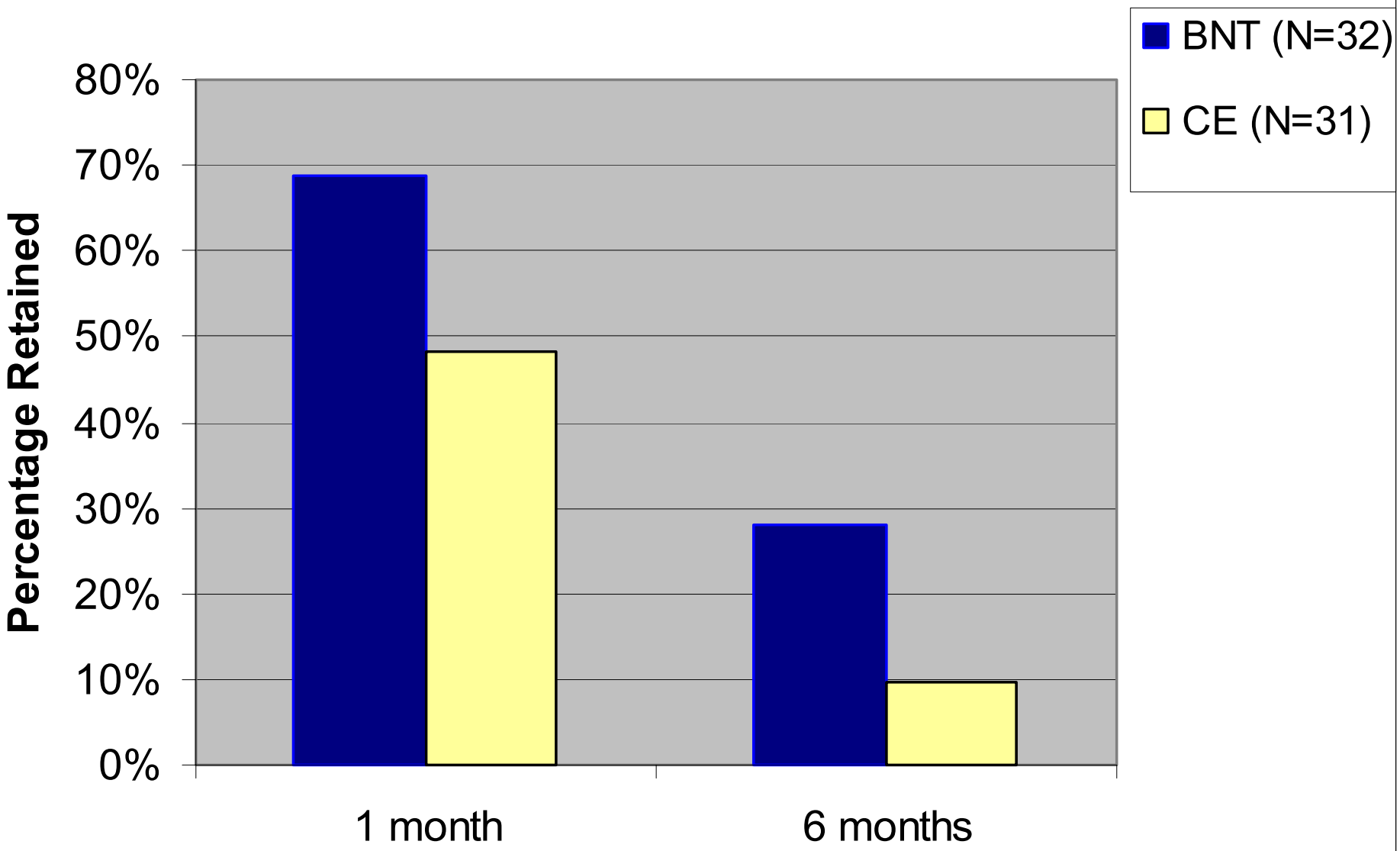
Efficacy of BNT

- **Pilot Trial:** Initially, 47 participants entered a pilot trial during which time a working treatment manual was constructed and therapist training procedures were established. Preliminary evaluation demonstrated 31% of patients completed trial and based on findings, BNT was modified to better address **severe depressive symptoms** and **methadone use at baseline**, two significant predictors of premature attrition in our pilot sample.
- **Randomized Trial:** Currently, 74 participants have entered randomized trial in which one is assigned to either BNT or Compliance Enhancement Therapy (CE), a control therapy intended to simulate standard outpatient psychiatry

Outcome Measures

- Treatment retention (weeks in treatment)
- Naltrexone compliance (% of pills taken)
- Abstinence from opiates (% of opiate-free urines)

Figure 1. Percentage Retained To One Month and Six Months



Conclusions and Plans

- Preliminary findings suggest that a greater percentage of patients in BNT are retained in treatment, perhaps by securing a network that promotes consistent adherence to naltrexone. It is likely that patients in CE, who self-monitor compliance, discontinue their medication, relapse to heroin use, and stop attending treatment visits. This hypothesis continues to be examined with collection of follow-up data.
- Future randomized trials are being planned that will involve a depot formulation of naltrexone during detoxification. This is in an effort to improve methods to prevent premature attrition and promote retention in treatment which occurs in both groups.