Community Reinforcement Approach
for
Addictions

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New Mexico

- 2nd poorest state in USA
  - *"Thank God for Mississippi"*
- Treatment expensive
- Improving regulation for therapists
- So lots and lots of AA meetings
- Low use of evidence based treatments
- Limited detox facilities

Community Reinforcement Approach

The Community Reinforcement Approach (CRA) (Azrin *et al.*, 1982), focuses on changing the individual's social environment by developing rewarding employment, leisure activities and relationships that do not involve alcohol. Partners, family and friends are viewed as crucial collaborators in the treatment process and their roles may include supervising disulfiram, being partners in marital counselling, active agents in re-socialisation and reinforcement programmes, and anticipating relapse or other problems.

BF Skinner

- CRA is based on Operant Conditioning

Nathan Azrin, PhD

- received his PhD from Harvard in 1956 as a student of B. F. Skinner. His early work was in laboratory experiments with animals and humans to define the initial principles of operant conditioning. Subsequently his work has had the single-minded focus of developing novel and validated treatments for applied, clinical and common human problems after his early laboratory studies of positive and negative reinforcement and animal aggression. His applied innovations have included: the initial development of the "Token Economy" with T. Ayllon; the development of effective training procedures for independent self care for the "untrainable" mentally retarded; the Community-Reinforcement method of alcohol and drug addiction; the Habit-Reversal treatment for tics,

Bob Meyers

- One of the original CRA Therapists
- Associate Professor at CASAA UNM

HTBS HTA

Behavioural Self-Control Training, Motivational Enhancement Therapy, Marital/Family Therapy and Coping/Social Skills Training are clinically and cost-effective psychosocial interventions and are recommended treatment options for the prevention of relapse in alcohol dependence.

HTBS CAUTION

Although Marital/Family Therapy has shown a beneficial effect it should be recognised that this approach is only usually feasible in those with relatives willing to invest substantial effort in the treatment and with the consent of the patient. Thus, it is an option for treatment of only some patients. An exception to this is the Community Reinforcement Approach, which has been shown to be effective when a contractual element with non-family members has been tested.

MONEY MONEY MONEY MONEY MONEY MONEY

The results show that the four psychosocial therapies (Coping/Social Skills Training, Behavioural Self-Control Training, Motivational Enhancement Therapy and Marital/Family Therapy) each produce net savings of around £1600 per incremental abstinent patient. This means that adopting the intervention saves the NHS Scotland £1600 per additional abstinent patient. These savings arise because the improved abstinence rate results in a lower incidence of diseases, thereby saving inpatient hospital stays and other disease-related costs. Further societal savings will also be realised, thereby further increasing the cost effectiveness of the therapies.

The **Community** Reinforcement Approach. A **Guideline developed** for the **Behavioral Health Recovery Management project**.
Robert J. Meyers and Daniel D. Squires

www.bhrm.org/**guidelin**es/CRAmanual.pdf

CRA Elements

- Functional Analysis
- Sobriety Sampling
- Disulfiram Use with a Monitor
- Treatment Planning
- Behavioral Skills Training
- Job Skills Social and Recreational Counselling
- Marital Therapy
- Relapse Prevention involving early warning

Functional Analysis

- Triggers to drinking
  - Who what where thinking feeling
- Drinking Behaviour
  - Short term positives and longer term negatives
- Triggers to Non-drinking behaviours
  - Who what where thinking feeling
- Non-drinking behaviours
  - Short term negatives and longer term positives

Sobriety Sampling

- You can always start drinking again if you want after the experiment

Treatment Plan

- What can I help you with
- Happiness Scales
- Goals of treatment form

Behavioural Skills Training

- Communication training
- Problem Solving
- Drink refusal skills
- Managing negative thinking

Job Skills Social and Recreational Counselling

- The original job clubs
- Job finding skills
- Dry social club
- Sampling

CRA Marital Therapy Elements

- Setting positive expectations
- Marriage happiness scale
- Perfect marriage form
- Daily reminder to be nice
- The basics of positive communication skills
- Practising requests with the perfect marriage form
- Enhancing requests with new skills
- The role of the listener
- The art of negotiation

Relapse Prevention

- Functional analysis
- Early warning

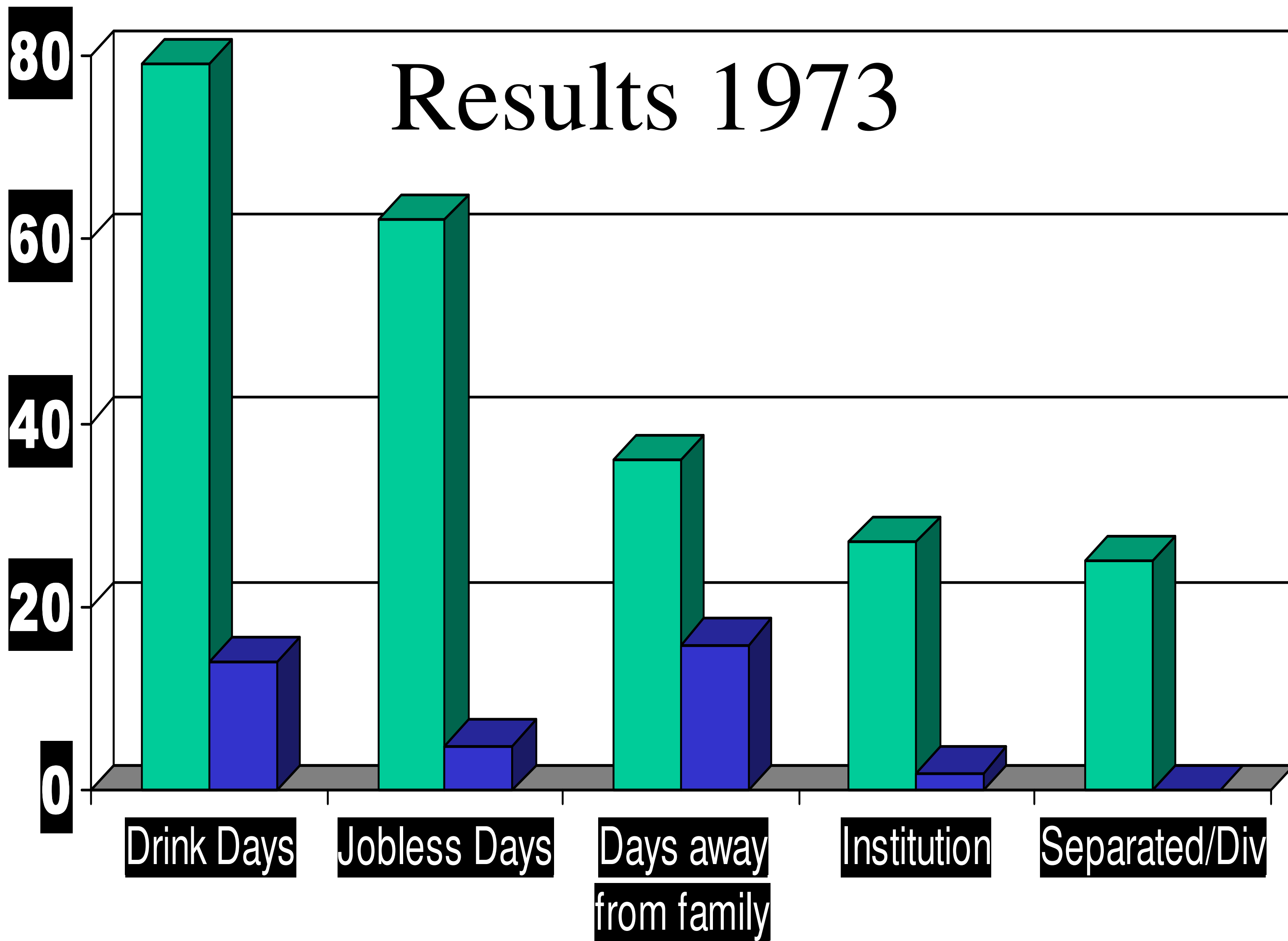
A COMMUNITY-REINFORCEMENT APPROACH TO ALCOHOLISM*

GEORGE M. HUNT and N. H. AZRIN 1973

- Based on operant reinforcement
- Developement of new procedures that rearranged community reinforcers such as the job, family and social relations of the alcoholic such that drinking produced a time-out from a high density of reinforcement.
- CRA group drank less, worked more, spent more time with their families and out of institutions than did a matched control group.

CRA clinical trials

- Hunt & Azrin '73 (inpatient alcoholics)
  - job finding counseling
  - behavioral/marital tx
  - social/leisure counseling
  - reinforcer access counseling
  - social club
  - home visits
  - total 50 hrs per client



Results 1973
80
60
40
20
0
Drink Days
Jobless Days
Days away from family
Institution
Separated/Div
Traditional
CRA

CRA: New & Improved

- Disulfiram w/compliance protocol
- problem prevention rehearsal
- buddy system
- early warning mood monitoring

- Average 30 contact hrs
- some group tx
- ~70% as aftercare home visits

1982 CRA Azrin et al.

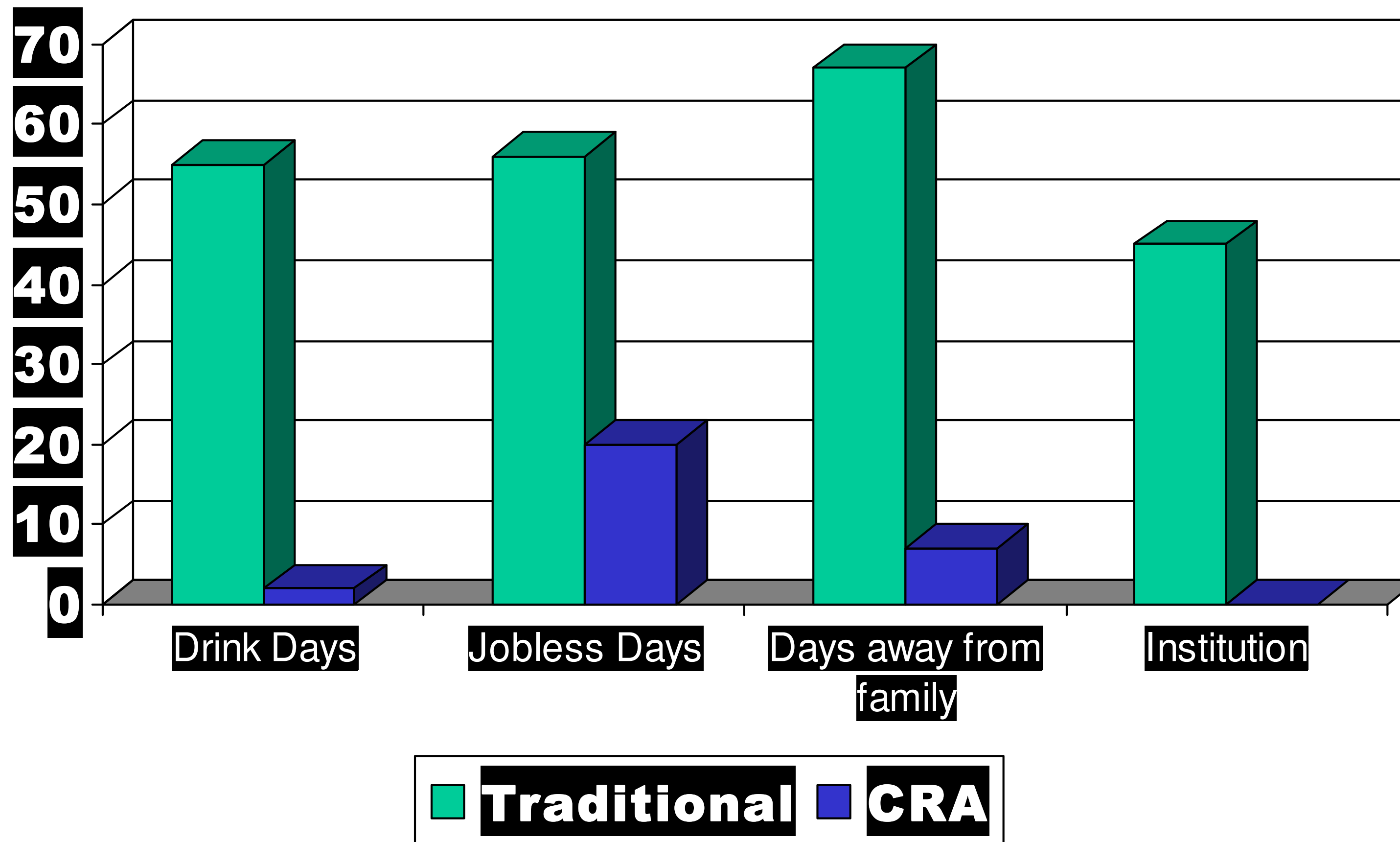
- 43 outpatient alcoholics
- 3 groups
- traditional tx only
- traditional tx + disulfiram compliance
- CRA only

- Increased use of Positive reinforcement
- sobriety sampling
- immed. Disulfiram
- drink refusal training
- +/- functional Analysis
- Averaged 5 tx sessions
- job club
- phone contacts

Results of 1982 study

- 6 month follow up
- Disulfiram only group % days abs 74%
- CRA + % days abs 97%
- Traditional group % day abs 45%

CRA new & improved: Results



The community reinforcement approach with homeless alcohol-dependent individuals.
Smith et al 1998

Homeless alcohol-dependent individuals were randomly assigned to receive either Community Reinforcement Approach (CRA) or the standard treatment (STD) at a large day shelter. Ninety-one men and 15 women participated. CRA participants significantly outperformed STD group members on drinking measures. Both conditions showed marked improvement in employment and housing stability.

Community reinforcement approach in the treatment of opiate addicts Abbott et al 1998

- CRA -V- standard counselling in methadone maintenance.
- RCT
- N=180
- 6-month follow-up, the two CRA groups were combined for analyses. Weekly urinalysis drug screens and Addiction Severity Index (ASI) scores at intake and 6 months were compared.
- CRA significantly better than the standard group
  - consecutive opiate-negative urinalysis (3 weeks)
  - 6-month ASI drug composite score.

Community reinforcement therapy for cocaine-dependent outpatients

Higgins et al 2003

RCT CRA+ vouchers versus vouchers only dependant on urines

N=100 cocaine-dependent outpatients

All patients earned incentives in the form of vouchers exchangeable for retail items contingent on cocaine-free urinalysis results during treatment weeks 1 to 12.

Incentives were combined with a 24-week course of CRA therapy

Patient drug use and psychosocial functioning were assessed at intake and every 3 months for 2 years after treatment entry.

Patients treated with CRA + vouchers had better treatment retaintion, used cocaine and got drunk less often.

Patients treated with CRA + vouchers also reported more days of paid employment, less depression, and fewer hospital nights and legal problems during follow-up.

A systematic review of the effectiveness of the community reinforcement approach in alcohol, cocaine and opioid addiction
Roozen et al 2004

- The search yielded 11 studies of mainly high methodological quality.
- Strong evidence that CRA is more effective than usual care
- Strong evidence that CRA with ‘incentives’ is more effective with regard to cocaine abstinence.
- Some evidence that CRA with ‘incentives’ is more effective in an opioid detoxification program.
- There is limited evidence that CRA is more effective in a methadone maintenance program.
- Strong evidence that CRA with abstinence-contingent ‘incentives’ is more effective than CRA (non-contingent incentives) treatment aimed at cocaine abstinence.

The Cannabis Youth Treatment (CYT) Study: Main findings from two randomized trials Dennis et al 2004

- Overall, the clinical outcomes were very similar across sites and conditions; however, after controlling for initial severity, the most cost-effective interventions were MET/CBT5 and MET/CBT12 in Trial 1 and ACRA and MET/CBT5 in Trial 2.

Advice Versus Extended Treatment for Alcoholism: a controlled study

Chick et al 1988

- *One hundred and fifty-two attenders at an alcohol problems clinic were randomly allocated to one session of advice or extended in or outpatient treatment. Two years later, the group who were offered extended treatment were functioning better, in that over the year prior to the independently conducted follow-up interview they had accumulated less harm from their drinking than those only treated briefly. Abstinence was not, however, more common in patients offered extended treatment*

NIAAA COMBINE
Combined Behavioural Intervention

- 20 sessions
- Enhances reinforcement and social support for abstinence
- Incorporates MET
- Involves family throughout
- Treatment Plan
- Social skills training

Effectiveness of treatment for alcohol problems: findings of the randomised UK alcohol treatment trial (UKATT)

UKATT Research Team 2005

- Pragmatic RCT of SBNT v MET
- Seven sites Birmingham, Cardiff & Leeds
- 742 clients seen at 3 & 12 months
- SBNT as effective as MET
- £1 on treatment saves £5 for public services

Why isn't CRA used?

- Cost?
- Not twelve step?
- Not known about?
- Not enough evidence?
- Funny name?
  - Community Reinforcement Approach Programme
- Ahead of its time?
- Moralising attitudes to rewarding addicts

Community Reinforcement & Family Training

Part of the Community Reinforcement Approach
Originated by Sisson, Arzin & Hunt in Illinosis
Developed by Bob Myers, Jane Ellen Smith & Bill Miller in New Mexico

Helps family members and get drinkers to treatment
5 Clinical Trials with drug and alcohol problems

Kirby KC, et al. (1999) Community reinforcement training for family and significant others of drug abusers: a unilateral intervention to increase treatment entry of drug users., Drug Alcohol Depend, 56(1):85-96.

Meyers RJ, et al. (2002) A randomized trial of two methods for engaging treatment-refusing drug users through concerned significant others., J Consult Clin Psychol, 70(5):1182-5.

Meyers RJ, et al. (1998) Community reinforcement and family training (CRAFT): engaging unmotivated drug users in treatment. J Subst Abuse, 10(3):291-308.

Miller WR, et al. (1999) Engaging the unmotivated in treatment for alcohol problems: a comparison of three strategies for intervention through family members., J Consult Clin Psychol, 67(5):688-97

Sisson RW, Azrin NH (1986) Family-member involvement to initiate and promote treatment of problem drinkers. Journal of Behavior Therapy and Experimental Psychiatry, 17(1):15-21

Elements of CRAFT

Building Rapport & Trust

Precautions Against Domestic

Two functional analyses

Drinker’s triggers for drinking and the consequences
Drinker’s triggers for nonusing, pro-social behaviour and its consequences.

Communication training

Use of positive reinforcement

Use of negative consequences

Teaching the Partner how to rewards themselves

Getting the drinker into treatment

Manuals

CRAFT self help manual

Get Your Loved One Sober: Alternatives to Nagging, Pleading, and Threatening
Robert Meyers Hazelden 2004

CRAFT Therapist Manual (Autumn 2004)
Robert Myers & Jane Ellen Smith

A randomised controlled trial examining the impact of the community reinforcement approach and motivational enhancement therapy on cohabiting concerned significant others involved in the treatment of alcohol problems.

Ian Davidson, Jonathan Chick, Eunice Reed,
Alcohol Problems Service, Lothian NHS PCO
Robert Rush, Centre for Integrated Healthcare Research, Queen Margaret University College

Purpose

- This study will allow us to decide whether the additional effort that CRA requires can be offset by improvements in the well-being of the CSO involved in the treatment beyond that which might be expected to result from the reduction in drinking achieved using the briefer MET.

Design

- This RCT aims to recruitment 48 couples of patients and CSO from amongst all new referrals to the Alcohol Problems Service in West Lothian
- Follow up at end of treatment 13 weeks

Eligibility Criteria

- alcohol dependence (ICD- 10),
- at least two days of heavy drinking in the previous 90,
- the patient and CSO cohabiting
- informed consent.

Treatments

- Both treatments will delivered by the principle investigator over 12 weeks,
- MET (4 sessions, 1 with CSO) using the manual developed for Project MATCH (Miller et 1995)
- CRA (12 sessions, all with CSO) using Meyers & Smith (1995).

Main Outcome Measures

- The main measures will be collected before and after treatment by self-completion questionnaires from the CSO.
  - the Symptom Rating Test
    - (Kellner & Shefield 1973)
  - Family Member Impact Questionnaire
  - The Coping Questionnaire,
  - Hopefulness–Hopelessness Questionnaire
    - (Orford 2005)

Covariates

- CSO versions of before and after
  - Form 90a (Miller 1996)
  - Alcohol Related Problems Questionnaire (Patience et al 1997)

Data Collection

- Follow-up interviews with CSO will be divided between other APS team members who are blind to the treatment allocation.
- The principle investigator will conduct the initial and follow-up interviews with patients. These interviews will be similar to those routinely conducted by the service except for adding the chosen measures used in the trial, Form 90 and ARPQ.

Analysis

- Intention-to-treat analysis
- secondary analysis to maximise contrast between treatments, couples completing at least three treatment sessions will be entered.
- We are assuming a standardised difference of 0.7 between groups
- The trial is scheduled to report in 2007.