

## **Treatment of Substance-Use Disorders**

### **Effective Identification of Substance-Use Disorders**

- ✦ Recognize prevalence of problem
- ✦ Drop stereotypes
- ✦ Always screen for disorders
- ✦ Corroborate results

### **Screening**

Consumption of four or more drinks a day (a drink equals 4 oz of wine, 12 oz of beer, or a shot (1.5 oz) of 80 proof beverages) for four or five days or more, some blood tests are likely to change.

Relevant blood tests for evaluation include:

- ✦ GGT
- ✦ MCV
- ✦ Uric acid
- ✦ Liver Function Tests (LFTs)

High-Normal or abnormal values in any of these tests indicate the necessity of closely reviewing the history for potential evidence of alcohol dependence or abuse.

For drugs other than alcohol, a urine toxicology screen can be helpful, although it is not diagnostic.

- ✦ Short half-life drugs such as lorazepam (Ativan) or heroin, toxicology screens only stay positive for a day or so.
- ✦ Long half-life drugs (such as methadone or diazepam) toxicology screens can stay positive for a week or so.
- ✦ Cannabinols can be picked up in the urine for three days to perhaps two weeks after last use.
- ✦ Amphetamines and cocaine can sometimes be observed in the urine for three days or so after last use.

## Other Screening Instruments

- ♦ The Michigan Alcoholism Screening Test (MAST), a twenty-five item self-administered questionnaire, can be used for self-reporting of alcohol (and perhaps drug) problems.
  - Paper and Pencil test
  - Not diagnostic of abuse or dependence and can only be used as an initial screen to be followed by an appropriate in-depth history.
  
- ♦ The CAGE-AID
  - Administered verbally during an interview
  - The name CAGE is an acronym of the main points in the four questions and AID signifies **A**dapted to **I**nclude **D**rugs.
  - The four questions of the CAGE-AID are:
    - ♦ Have you felt you ought to **C**ut down on your alcohol and drug use?
    - ♦ Have people **A**nnoyed you by criticizing your drinking or drug use?
    - ♦ Have you ever felt bad or **G**uilty about your drinking or drug use?
    - ♦ Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (**E**ye-opener)?

(Brown, R.L., & Rounds, L. A. (1995). Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in a primary care practice. Wisconsin Medical Journal, 94, 135-140)

## **Approaches for Sharing the Diagnosis (Confrontation or Intervention)**

### Possible methods of approach

Use the initial concern of the patient and point out how alcohol or drugs might be contributing to or causing:

- ♦ sleeping problems
- ♦ anxiety
- ♦ high blood pressure

Share with the patient the pattern of physical findings and laboratory test results to demonstrate that there is evidence of some impairment affecting his or her life and body.

- ♦ Labels of abuse or dependence might be best initially approached indirectly by telling the patient that he or she appears to have reached a point where substance use is causing a great deal of problems.
- ♦ Remind the patient that he or she is responsible for his or her own actions, and that it is not the role of the physician to force the patient to do anything. However, as the person's physician, you have a great deal of concern and would like to broach the need for complete abstinence from substances.

A rejection of the need for abstinence at the initial confrontation can still serve as the basis for the next intervention, when the next physical examination occurs or the next crisis develops.

Some clinicians have recommended a concerted effort of family and friends to carry out a constructive confrontation with the individual so that he or she might enter treatment immediately. Caution must be exercised as this approach may alienate the person from his or her sources of support.

## **Detoxification for Depressants, Stimulants, and Opiates**

- ♦ Physical exam
- ♦ Educate, reassure
- ♦ Vitamins, etc.

- ♦ Meds?

## **GENERAL APPROACH TO REHABILITATION FOR SUBSTANCE-USE DISORDERS**

Justify any actions you take through evidence that their assets are greater than their liabilities.

All major treatment efforts should be validated by controlled trials in the literature.

It is important to guard against overzealous acceptance of new treatments without adequate data.

Establish realistic goals:

- ♦ based on the highest level of functioning prior to the onset of substance use disorders
- ♦ in some cases, including those where alcohol has caused irreversible damage to the CNS, the person will not be able to return to pre-substance levels of functioning.

Share these goals with each patient.

It is important that both the treatment staff and the patient recognize that changing the lifestyle from one centered around substance use to one without substances requires a long-term commitment on the part of the individual with the substance use disorder.

Do not take final responsibility for the patient's actions.

It is his or her job to work through recovery with your help.

Use all available resources to help patients optimize their levels of functioning.

- ♦ reach out to family members
- ♦ encourage participation in social groups
- ♦ encourage the use of self-help groups
- ♦ encourage the incorporation of strengths such as religion when appropriate

Be certain to attempt to match the specific goals of the patient with the specific

treatments being offered.

## **General Goals of Treatment Programs**

Optimize levels of physical functioning through:

- ♦ careful physical examination
- ♦ appropriate detoxification procedures when needed
- ♦ efforts to reverse physical pathology.

Efforts that maximize motivation for abstinence

- ♦ Lectures regarding the future dangers of continued use of substances and the potential benefits of abstinence.
- ♦ Discussion groups with patients emphasizing problems that have occurred regarding substance use in the past, and the manner in which desired goals can be obtained with abstinence in the future.
- ♦ Discussion groups and lectures with family members to offer the same information.
  - This also decreases the chance that family members will feel as if they are being inappropriately blamed for the problems of the patient.
- ♦ Using counselors who are themselves recovering from a substance use disorder (after a year or two of abstinence) offers a potential model of recovery demonstrating “if they can do it so can I.”
- ♦ Self-help groups such as Alcoholics Anonymous, Cocaine Anonymous, Narcotics Anonymous, and so on all help accomplish each of the above-mentioned goals.
  - These self-help groups also have parallel meetings for adult relatives and friends (e.g., Al-Anon) and for teenagers related to the patient in treatment

(e.g., Al-Ateen).

Rebuild a life without substances.

- ♦ Admitting to the patient that substances have been a very important part of his or her life and are very difficult to give up.
- ♦ Using lectures and discussion groups to talk about issues likely to arise that will require some life changes in order to optimize the chance for continued abstinence.

Topics include:

- the appropriate use of free time
- how to interact with relatives and friends now that you are sober
- how to appropriately interact with or avoid substance-using friends
- how to say no to substances when offered (refusal skills)

Relapse prevention

Topics to be covered in relapse prevention include:

- ♦ the likelihood of minor relapses/(slips)
- ♦ how to handle a relapse/slip if it occurs
- ♦ how to avoid situations in which substance use is likely
- ♦ how to identify emotional conditions or feelings that might increase the likelihood of returning to substance use

## **Helping Select an Appropriate Rehabilitation Program**

**Inpatient**

**vs.**

**Outpatient**

## **The Role of Medications in Rehabilitation**

### Alcohol

No medications are routinely appropriate for the rehabilitation of individuals with alcohol dependence, although clinicians should be aware of the following:

#### Disulfiram (Antabuse)

Large double-blind controlled trials do not demonstrate an effectiveness that is significantly greater than placebo.

Interaction of Disulfiram in individuals with serious preexisting medical conditions like heart disease or diabetes can be problematic.

The potential side effects of this drug that can occur even in the absence of alcohol are considered risky and should be noted.

- ♦ severe neuropathies
- ♦ potentially lethal hepatitis
- ♦ the possibility of severe depressions or psychoses

#### Antidepressants

- ♦ Double-blind controlled trials do not indicate that depressive-symptomatology or abstinence is significantly improved with antidepressants, unless an alcohol dependent individual has evidence of an independent major depressive disorder as described in the prior lecture.

#### Lithium

- ♦ Similarly, there are no data from double-blind controlled trials indicating that lithium is any better than placebo for alcohol dependent individuals unless there is evidence of independent manic-depressive disease.

#### Naltrexone (Trexan)

- ♦ There are some preliminary data from two studies indicating that patients taking Trexan might be less likely than those on placebo to relapse to heavy drinking after a slip.

### Serotonin re-uptake inhibitors

- ♦ These drugs, including fluoxetine (Prozac), have been shown in animal studies and studies of normal human subjects to decrease alcohol intake by perhaps 10% to 20%.

### Acamprosate (calcium acetylhomotaurinate)

- ♦ Chemical structure similar to the amino acids taurine and gamma aminobutyric acid (GABA).
  - stimulates the inhibitory actions of GABA on neuronal transmission.
  - antagonizes the excitatory effects of glutamate.

### Stimulants

No medications have been demonstrated to be routinely useful in the rehabilitation of stimulant dependent individuals (e.g. those dependent on amphetamines or cocaine).

While preliminary data indicated the potential usefulness of antidepressant medications and dopamine-boosting drugs such as bromocriptine (Parlodel), double-blind controlled trials have not yielded promising results.

### Opiates

Both methadone and naltrexone (Trexan) appear to be potentially useful.

Patients are not “cured” of opiate dependence, but their physical addiction is switched to a safer drug.

When doses of 50 to 100 mg of methadone per day are used there is evidence of a decrease in IV street drug use, a decrease in crime, and an increased ability to function at work and in a family setting.

- ♦ These benefits are most often observed for individuals who were relatively stable in their life functioning before their dependence on opiates began.

Naltrexone (Trexan) is an opiate antagonist drug (blocking the effects of heroin) given at a usual dose of 50 mg to 150 mg per day and which can be administered once per day.

Trexan has few major side effects.

### **Aftercare**

Lessons learned can be reinforced.

Aftercare lectures, counseling, and family groups are an essential part of continuing to learn about other complex aspects of recovery during the first 6 to 12 months of abstinence.

Aftercare groups should begin approximately once per week, but can be spaced out over a longer period as recovery continues.

The time of greatest risk of relapse is the first three months, followed by the second highest period of relapse in the subsequent three months.

An essential component of aftercare for most substance dependent individuals is self-help group participation.

### **Summary**

Rehabilitation efforts should focus on:

- ♦ optimizing levels of physical functioning
- ♦ increasing motivation for abstinence
- ♦ helping individuals to rebuild their lives without substances
- ♦ helping them to diminish the probability of relapse (relapse prevention)

Goals are instituted during an intensive initial phase of rehabilitation, often lasting from two weeks to four weeks, include:

- ♦ education
- ♦ counseling
- ♦ outreach to families
- ♦ the use of self-help groups

Medications have only a limited role in most rehabilitation efforts.

Efforts must be made to maintain contact with patients and to encourage their participation in aftercare as well as self-help groups for extended periods of time.

## SUGGESTED LITERATURE

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