Treating Substance Abuse Among Prenatally Exposed Persons

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Session Goals

- Examine traditional treatment approaches and goals
- Identify limitations of these approaches
- Identify alternative approaches

Traditional Approaches

- Alcoholics Anonymous
- Brain Changes and Their Impact
- Assessing the Fit Between Approach and Person In Need
What is AA?

In its own words...

- Alcoholics Anonymous is a fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others to recover from alcoholism
- The only requirement for membership is a desire to stop drinking

What is AA?

In its own words...(continued)

- There are no dues or fees for AA membership; we are self-supporting through our own contributions
- AA is not allied with any sect, denomination, politics, organization or institution; does not wish to engage in any controversy; neither endorses nor opposes any causes
- Our primary purpose is to stay sober and help other alcoholics to achieve sobriety
What AA Isn’t

Religious
- There are no doctrines, dogma, or protocol
- AA is a program of attraction and part of its great success is that AA has been accepting of people with all types of beliefs and backgrounds
- It offers a “suggested” program of recovery with its only requirement for membership being “a desire to stop drinking”

12 Steps

1. We admitted we were powerless over alcohol, and our lives had become unmanageable
2. Came to believe that a power greater than ourselves could restore us to sanity
3. Made a decision to turn our will and our lives over to God as we understood him
4. Made a searching and fearless moral inventory of ourselves
5. Admitted to God, to ourselves and another human being the exact nature of our wrongs
6. Were entirely ready to have God remove all these defects of character
12 Steps

7. Humbly asked Him to remove our shortcomings
8. Made a list of all persons we had harmed, and became willing to make amends to them all
9. Made direct amends to such people wherever possible, except when to do so would injure them or others

10. Continued to take personal inventory and when we were wrong promptly admitted it
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out
12. Having had a spiritual awakening as the result of these steps we tried to carry this message to alcoholics and to practice these principles in all our affairs

Progression of 12-Steps

Steps 1-3:
- Admission and acceptance of powerlessness over alcohol
- Unmanageability of life
- Surrender of will

Steps 4-10:
- Self-examination
- Amends and restitution

Steps 11-12:
- Service
The Big Book

The BIG BOOK of Alcoholics Anonymous has recently passed the 20 million sales mark, making it one of the top nonfiction best-sellers of all time.

Fitting It....

- Capacity for successful interpersonal relationships
- Capacity to review actions and consider impact on others (both in present and in past)
- Capacity to engage abstract concepts and thinking
- Capacity for self-disclosure and to hold self accountable to others through community

Brain Changes and Their Impact

- Brain Abnormalities
- White Matter Abnormalities
- Reality of Conceptual Skills
- Wisconsin Cart Sorting Test (WCST)
- California Card Sorting Test, Delis-Kaplan Executive Function System (DKEFS)
- Deficits In...
- Deficits Translate To What Kinds Of Problems
Brain Abnormalities


White Matter Abnormalities


Reality of Conceptual Skills

- WCST: Wisconsin Cart Sorting Test
- CST: Card Sorting Test
  - Selected as complementary tasks
- Controls, Prenatally Alcohol Exposed (with and without FAS)
- M Age = ~11 years
- M IQ: Controls = 107 + 12
  Alcohol Exposed = 89 + 12

**Wisconsin Cart Sorting Test (WCST)**

- Shape
- Number
- Color


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**California Card Sorting Test Delis-Kaplan Executive Function System (DKEFS)**

- Animals/Transportation
- Air/Land
- Syllable/Syllables
- Uppercase/Lowercase


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**California Card Sorting Test Delis-Kaplan Executive Function System (DKEFS)**

- Large/Small
- Curved/Straight
- Blue/Yellow
- Red/White

Deficits In:
- Set-Shifting – Fewer categories achieved
- Incorporating Feedback – Perseveration
- Incorporating Direction – Executing directed sorts
- Verbalization of Principles

Deficits Translate to What Kinds of Problems
- Unable to "see" alternatives
- Unable to change behavior when told it isn’t effective
- Unable to integrate/act on concepts provided by others
- Unable to answer

Assessing the Fit Between Approach and Person In Need
- Contingency Management
- Caveats Regarding Contingency Management
- Behavioral Contingencies
- Identify Observable Behaviors
- Identify Meaningful Outcomes
- Apply Contingencies Consistently
Contingency Management

- Useful for initiating abstinence
- Typically continues about 12 weeks
- Consists of 3 basis steps (below)

Step 1
Step 2
Step 3

Contingency Management

- Patient is rewarded for demonstrating abstinence from substance of abuse
  - Reward increases for each negative test
  - Typically obtains bonus rewards for three positive tests in-a-row

Contingency Management

- Reward not provided (and reinforcement schedule reset to original value) for positive drug test
- Motivation switches from “external” to “internal” as they develop self-efficacy to maintain sobriety
Caveats Regarding Contingency Management

- Shift from externalizing to internalizing control may not be possible for all clients
- Reliance only on withholding reward may not be sufficient to deter behavior
- Increasing the number of required runs (i.e. increasing the fixed ratio for reward) must be carefully evaluated

Behavioral Contingencies

- Identify observable behaviors
- Identify meaningful outcomes
- Apply contingencies consistently

Identify Observable Behaviors

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<td>Context</td>
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Identify Meaningful Outcomes

- 30-Day Coin Reward?
  - Symbolic vs. Material Reward
- Context Specific:
  - Where / When / How
- Community:
  - Realities of community responsibilities
- Monitoring & Reminders

Apply Contingencies Consistently

All the Time – As in Every Day, Every Way

Contingencies:
- Observable
- Inappropriate behavior linked to outcomes in “all” settings
- Both costs & rewards

Behavioral Intervention

- May not be a time-limited intervention for those with special needs
- Requires on-going monitoring across all environments
- Within framework, emphasis on working within a system to alter specific behaviors
- The behavioral plan must be reviewed on the basis of individual and environmental changes
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Source Material

- Alcoholics Anonymous - Big Book 4th Edition
- Alcoholism: Clinical & Experimental Research:
### Source Material

- **Alcoholism: Clinical & Experimental Research:**

### Source Material

- **Alcohol Research & Health (Publication of the U.S. National Institute on Alcohol Abuse and Alcoholism):**

- **Delis-Kaplan Executive Function System:**

### Source Material

- **Wisconsin Card Sorting Test:**
Contact Information

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