UNDERSTANDING and TREATING ALCOHOLISM
WHEN DID PEOPLE START USING ALCOHOL?
Alcohol is a part of the human diet

- **Genesis 14:18**
  - Then Melchizedek king of Salem brought out bread and wine.

- Egyptians used alcohol as early as 4000 BC
- Chinese used alcohol as early as 7000 BC
- Distilled alcohol was produced by Muslim chemists in the 7th and 8th centuries
Is Alcohol Use a Sin?

- 247 Biblical References on Alcohol
- Jesus and Alcohol
  - First Miracle
  - Pharisees accuse him of being a wine bibber
  - Eucharist
Old Testament Warnings on Alcohol

- Genesis 9:20-26 - Noah became drunk; the result was immorality and family trouble.
- Lot was so drunk he did not know what he was doing; this led to immorality.
- Leviticus 10:9-11 - God commanded priests not to drink so that they could tell the difference between the holy and the unholy.
- Proverbs 23:29-30 - Drinking causes woe, sorrow, fighting, babbling, wounds without cause and red eyes.
New Testament Warnings

- Luke 21:34 - Drunkenness will cause a person not to be ready for the Lord’s return.
- 1 Corinthians 5:11 - If a Christian brother is a drinker, do not associate with him.
- 1 Corinthians 6:10 - Drunkards will not inherit the kingdom of God.
- 1 Timothy 3:2-3 - Bishops (elders) are to be temperate, sober, and not near any wine.
- 1 Timothy 3:8 - Deacons are to be worthy of respect and not drinkers.
Alcohol Abuse is Sin

- Hamartia- Missing the Mark
- Christ and His Holy Church Heals All Sin
- This does not forbid use of prayer and other treatments
WHY DO PEOPLE USE ALCOHOL?
Reasons for Alcohol Use

- Curiosity (learning)
- Peer Pressure
- Self-Medication
  - Stress Relief
  - Depression
  - Energy
- Brain Reward
  - Pleasurable Feelings
WHAT IS ADDICTION?
Nonsense! As long as you take it every day on schedule, you won't have to worry about addiction!
ADDICTION IS NOT

- USE

- (ABUSE) or INTOXICATION
Signs of Alcohol Addiction

- A Person
  - Fails to fulfill major role obligations at work, school or home
    - Absences
    - Poor performance
    - Behavioral problems
    - Neglect
Signs of Alcohol Addiction

- A person keeps using alcohol in dangerous situations or
- Despite substance related legal problems
Signs of Alcohol Addiction

- A person continues to drink despite problems with relationships with friends and family.
Signs of Alcohol Addiction

- **Tolerance**
  - Need for increased amounts of alcohol to achieve desired effects

- **Withdrawal**
  - Physical Symptoms associated with stopping use

- **Inability to cut down or stop alcohol use**
Signs of Alcohol Addiction

- Person spends a great deal of time obtaining, using or recovering from alcohol use.
- Because of alcohol use, giving up or reducing important social, occupational or recreational activities.
WHY DO PEOPLE BECOME ADDICTED TO ALCOHOL
COCKTAILS

BAR

QUIT RIGHT! THEY SHOULDN'T ALLOW PEOPLE TO INDULGE THEIR ANTI-SOCIAL ADDICTIONS IN PUBLIC!

EDITORS: Get The Raeside Editorial cartoons for your publication: adrian@reasidecartoon.com
What Causes Addiction?

THE DRUG

THE PERSON

THE ENVIRONMENT
Disease Model

- World Health Organization lists as a medical condition 1956
- American Medical Association calls it a disease in 1965

Characteristics of a Disease
- IRREVERSIBLE
- PROGRESSIVE
- INCURABLE

Key Feature is the persons inability to control drinking with treatment being total Abstinence
Genetic Factors

- Attributed to the Brain Vulnerability due to genetic/biological make-up of the individual

- **Specific genes have been identified** that regulate how we respond to alcohol

- Children of alcoholics are 4 times more likely to be alcoholic

- Identical twins born of alcoholics raised in non-alcoholic families had 3 times the rate of alcoholism than twins born of non-alcoholic parents raised in alcoholic families
Brain Structure

- Neuron is the cell of the brain
Dopamine Pathways

- Frontal cortex
- Nucleus accumbens
- VTA

Functions
- Reward (motivation)
- Pleasure, euphoria
- Motor function (fine tuning)
- Compulsion
- Perseveration

Serotonin Pathways

- Striatum
- Substantia nigra
- Hippocampus
- Raphe nucleus

Functions
- Mood
- Memory processing
- Sleep
- Cognition
Alcohol – Positive Health Effects

- Low to moderate doses:
  - no evidence of persistent, harmful effects
- 2 drinks/day lowers risk of heart disease
  - Mechanism - raises level of high-density lipoproteins in blood
- low levels:
  - promotes laughter, playful behavior
  - reduces inhibition
  - socialization
Alcohol Health Problems

- cancer (oral, esophageal, stomach, liver, lung, colorectal, breast)
- fat infiltration and cirrhosis of the liver
- sexual problems
- nutrient deficiencies
- motor vehicle and other accidents, suicides
Alcohol and the Unborn
Prenatal Maternal Use of Alcohol

- Most commonly used mind-altering substance
- Affects developing embryo
- 50,000 babies born yearly with alcohol related damage
- Even one drink can be a risk to baby’s health, yet 20% of women drink during pregnancy
- Heavy drinking by men can lead to infertility
General Outcomes of Prenatal Alcohol Use

- Alcohol in woman’s bloodstream reaches baby within one minute and can remain with the baby for 24 hours.
- Effects depend on the dose, pattern, and timing of alcohol exposure.
- Can adversely effect the development and function of placental, fetal organs and central nervous system.
- Increases risk of miscarriage, low birth weight, stillbirth and death in early infancy.
FETAL ALCOHOL SYNDROME

Fetal Alcohol Syndrome
Fetal Alcohol Syndrome
FAS Characteristics

- Small body structure/growth deficiency and dysfunction of the central nervous system can effect development in:
  - voluntary movement
  - perception, thinking, and memory
  - movement and balance
Adolescent Alcohol Use
Adolescents are More Susceptible to Alcohol Abuse than Adults

- Adolescents are less sensitive to the sedative and motor impairment effects of intoxication than adults
Adolescents Alcohol Abuse Susceptibility

Adolescents are more sensitive to the social disinhibition from alcohol use.

Want to get some beer? Sure!
Blood Alcohol Levels: So What?\(^{(8)}\)

- BAL = 0.03 to 0.12 (Euphoria)
  - Self-confident/daring
  - Short attention span
  - Poor judgment
  - Fine motor skills impaired
Blood Alcohol Levels

- BAL = 0.09 to 0.25 (Excitement)
  - Sleepy
  - Memory loss
  - Reaction time decreased
  - Uncoordinated/loss of balance
  - Blurry vision and impaired senses
Blood Alcohol Levels

- BAL = 0.18 to 0.30 (Confusion)
  - Confused/dizzy
  - Highly emotional
  - Cannot see/slurred speech
  - Uncoordinated/sleepy
  - May not feel pain as easily
Blood Alcohol Levels

- BAL = 0.25 to 0.40 (Stupor)
  - Can barely move at all
  - Cannot respond to stimuli
  - Cannot stand or walk
  - Vomiting
  - Lapse in and out of consciousness
Blood Alcohol Levels

- BAL = 0.35 to 0.50 (Coma)
  - Unconscious
  - Reflexes depressed
  - Decreased body temperature
  - Decreased breathing rate
  - Decreased heart rate
  - Could die
Blood Alcohol Levels

- BAL = Greater than 0.50 (Death)
  - *Breathing stops and that* says it all!
Alcohol Withdrawal Syndrome
Stage I: Tremulousness

- Symptoms appear within 6 to 36 hours of last drink
- 13-71% of alcohol dependent patients develop withdrawal symptoms
- Caused by autonomic hyperactivity

Stage I: Tremors

Symptoms
- Tremors
- Anxiety
- Agitation
- Insomnia
- Diaphoresis
- Anorexia
- Nausea
- Palpitations

Signs
- Tachycardia
- Hypertension
- Hyper-reflexia
- Hyperthermia

Stage II: Alcohol Hallucinations

- Occur within 12-48 hours of last drink
- 3-10% of withdrawal develop hallucinations
- Duration is variable
- Usually visual (pink elephants)
- Occasionally auditory, tactile (formication), olfactory

Stage III: Seizures “Rum Fits”

- Occur within 6 to 48 hours of last drink
- 3 to 15% of untreated patients develop seizures
- Grand mal
- Risk is increased by duration of alcohol abuse
- 40% are single episodes
- 30% of untreated patients go on to delirium tremens

Stage IV: Delirium

Tremens

- Begins 3 to 5 days after last drink
- Occurs in less than 5% of withdrawal patients
- Marked by disorientation and global confusion
- Mortality: 2-10%
- Death: cardiovascular, metabolic

### Stage IV: Delirium Tremens

#### Symptoms
- Confusion
- Hallucinations
- Hyperresponsiveness

#### Signs
- Hypertension
- Tachycardia
- Fever

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TREATMENT

RECOVERY
Don’t think you have to take this trip alone...
Treatment

YOU HAVE ONLY TWO CHOICES...

JAIL

THERAPEUTIC JUSTICE
Does Treatment Work?
Overview of National Treatment Outcome Studies

Charts Prepared & Released for Public Use by Dwayne Simpson (TCU), Robert Hubbard (NDRI-NC), Douglas Anglin (UCLA), & Bennett Fletcher (NIDA)
Long-Term Residential (LTR) Treatment

Changes from Before to After Treatment

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
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<td>Cocaine (Weekly)*</td>
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<td>Heroin (Weekly)*</td>
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<td>Heavy Alcohol*</td>
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<td>Illegal Activity*</td>
<td>41</td>
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<td>No FT Work*</td>
<td>16</td>
<td>24</td>
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<tr>
<td>Suicidal Ideation*</td>
<td>6</td>
<td>13</td>
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</tbody>
</table>

% of DATOS Sample (N=676)

Hubbard, Craddock, Flynn, Anderson, & Etheridge, 1997 (PAB)
Outpatient Drug-Free (ODF) Treatment
Changes from Before to After Treatment

% of DATOS Sample (N=764)

Cocaine (Weekly)* 42 18
Marijuana (Weekly)* 25 9
Heavy Alcohol* 31 15
Illegal Activity* 22 14
No FT Work* 82 76
Suicidal Ideation* 19 11

Hubbard, Craddock, Flynn, Anderson, & Etheridge, 1997 (PAB)
Short-Term Inpatient (STI) Treatment

Changes from Before to After Treatment

Cocaine (Weekly)*
Marijuana (Weekly)*
Heavy Alcohol*
Illegal Activity*
No FT Work
Suicidal Ideation*

% of DATOS Sample (N=799)

Hubbard, Craddock, Flynn, Anderson, & Etheridge, 1997 (PAB)
Alcohol Abuse Treatment Core Components and Comprehensive Services

- Medical
- Mental Health
- Vocational
- Educational
- Financial
- Housing & Transportation
- Child Care
- Family
- AIDS / HIV Risks
- Legal

Core Treatment
- Intake Assessment
- Treatment Plans
- Group/Individual Counseling
- Abstinence Based
- Pharmacotherapy
- Self-Help (AA/NA)
- Urine Monitoring
- Case Management
- Continuing Care
- Continuing Care

Etheridge, Hubbard, Anderson, Craddock, & Flynn, 1997 (PAB)
Process of Change

CHANGE

CHANGE IS THE ESSENCE OF LIFE.
BE WILLING TO SURRENDER WHAT YOU ARE, FOR WHAT YOU COULD BECOME.
“Stages of Change” Model

- Initial ignoring or denial or the problem
- Changes take place gradually
- Internal decision using cost/benefit analysis
- Eventually behavior changes if efforts are maintained
- Relapse is a factor
Phase I: “Pre-Contemplation”

Phase One

“Pre-contemplation”

- Not seeing a problem
- Unwilling to change
- Discouraged to change
- Believe change is not possible
Phase II:
“Contemplation”

- Seeing a problem and considering whether to act
- They struggle to understand the problem, causes or solutions
- Gather information but may be far from change
- Not ready to commit
- Person can spend years here and you can help tip the balance
Phase III “Decision Making”

- Makes concrete plans to act soon
- Develops a plan
- Makes firm commitments to follow through
Phase IV: “Action”

- Doing something to change
- Implements plan
- Modification of behavior
- Most busy stage
- *Does not equate to genuine change, but is progress*
Phase V: “Maintenance”

- Working to maintain change
- Most difficult to sustain behavior
- High relapse rate
- Consolidation of gains in action

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"OH I COULD FIX IT FOR UNDER FIFTY BUCKS, BUT I JUST COULDN'T LIVE WITH MYSELF KNOWING THAT SOMEDAY YOU MIGHT NEED A WHOLE NEW ENGINE."
Using a Motivational Approach

- Express Empathy
  - Seeing things from the others perspective
  - Addressing feelings
    - Expression
    - Normalization
    - Validation
  - Non-judgmental
  - Accepting the person where they are
Motivational Interviewing

- Develop Discrepancy
  - Create and amplify discrepancy in the clients regarding:
    - Behavior and goals
    - Perceptions and reality
    - Examination of consequences of present behavior
    - Pros and cons of changing
  - Goal is for the person to present argument for need to change
Motivational Interviewing

- Avoid Argumentation
  - People are not labeled
  - Don’t argue with resistance
Motivational Interviewing

- Roll with Resistance
  - Encourage expression of resistance rather than fight against it
  - Reflect questions and concerns and allow client to be the source of answers.
Motivational Interviewing

- Stress the positive changes made...
  - Support confidence to change in number of ways
  - Show examples of positive change already made
  - Emphasize personal responsibility
  - Minimize setbacks
Techniques of MI

- Values Clarification
  - define value system
  - What they value most
  - Looking at conflict between values and behavior
  - Aids in self evaluation
Techniques of MI

- Problem solving
  - Enhance logical and rational thinking
  - Brainstorming
  - Empirical method of problem solving (CBT)
Techniques of MI

- Role Playing
  - Acting out situations before they occur
  - Dealing with problems or anticipate situations
- Environmental Restructuring
  - Alter and avoid substance use situations
  - Controlling the stimulus
  - Limit exposure to triggers
Techniques of MI

- Education is key
  - Providing information on
    - Addiction
    - Stages of change
    - Recovery
12-Step Groups
History of AA

- Founded in 1935
- Bill Wilson and Dr. Bob Smith
- Spiritual Cure to Alcoholism
- Abstinence Model
- In 2006 there were a reported 1,867,212 AA members in 106,202 AA groups worldwide
- AA groups are self-supporting and not charities, and they have no dues or membership fees.
History of AA

- **Demographics**
  - AA's 2004 survey of over 7500 members in Canada and the United States concluded that AA is composed of:
    - 89.1% white,
    - 65% male

- **Efficacy**
  - Average member sobriety is eight years
  - 36% sober more than ten years
  - 14% sober from five to ten years
  - 24% sober from one to five years
  - 26% sober less than one year.
Before coming to AA, 64% of members received some type of treatment or counselling, such as medical, psychological, or spiritual.

After coming to AA, 65% received outside treatment or counselling, and 84% of those members said that outside help played an important part in their recovery.
Many studies have demonstrated an association between AA attendance and increased abstinence or other positive outcomes.

In a 1989 AA survey found:
- 50% of first time attendees left in the first three months
- At the end of the first year 95% had left.
- 40% of the members sober for more than a year will remain another year
- 90% of those sober more than five years will remain sober and active in the fellowship another year.
12-Step Programs

- **Step I**
  - We admitted we were powerless over alcohol and that our lives have become unmanageable

- **Step II**
  - Come to believe that a power greater than ourselves could restore us to sanity

- **Step III**
  - Make a decision to turn our will and our lives over to the care of God, as we understand him
12-Steps

- **Step 4**
  - Made a searching and fearless moral inventory of ourselves

- **Step 5**
  - Admit to God, to ourselves and to another human being the exact nature of our wrongs

- **Step 6**
  - Being entirely ready to have God remove all these defects of character
12-Step

- **Step 7**
  - Humbly ask God to remove our shortcomings

- **Step 8**
  - Make a list of all persons we have harmed, and become willing to make amends to them

- **Step 9**
  - Make direct amends to such people, wherever possible, except when to do so would injure them or others
12-Step

- **Step 10**
  - Continue to take a personal inventory and when we are wrong, promptly admit it

- **Step 11**
  - Seek through prayer and meditation to improve our conscious contact with God, as we understand him, praying only for knowledge of his will for us and the power to carry that out
Step 12

- Having a spiritual awakening as the result of these steps, carrying the message to others, and practice these principles in all of our affairs.