Addiction Treatment Modalities

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Some Highlights of Institute of Medicine Report on
Conflict of Interest in Medical Research, Education, and Practice
As Related to Practice Guidelines
Remarks by Robert Knugoff, President
Consumers' CHECKBOOK/Center for the Study of Services for
AHRQ 2009 Annual Conference
Ideology to Evidence

- Eminence-Based Medicine
- Evidence-Proof Medicine
- Evidence-Based Medicine (EBM)

Alternatives to Evidence-Based Medicine

<table>
<thead>
<tr>
<th>Basis of clinical practice</th>
<th>Marker</th>
<th>Measuring device</th>
<th>Unit of measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence</td>
<td>Randomised controlled trial</td>
<td>Meta-analysis</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>Eminence</td>
<td>Radiance of white hair</td>
<td>Luminometer</td>
<td>Optical density</td>
</tr>
<tr>
<td>Vehemence</td>
<td>Level of stridency</td>
<td>Audiometer</td>
<td>Decibels</td>
</tr>
<tr>
<td>Eloquence (or elegance)</td>
<td>Smoothness of tongue or nap of suit</td>
<td>Teflometer</td>
<td>Adhesin score</td>
</tr>
<tr>
<td>Providence</td>
<td>Level of religious fervour</td>
<td>Sextant to measure angle of genuflexion</td>
<td>International units of piety</td>
</tr>
<tr>
<td>Diffidence</td>
<td>Level of gnomism</td>
<td>Nihlometer</td>
<td>Sighs</td>
</tr>
<tr>
<td>Nervousness</td>
<td>Litigation phobia level</td>
<td>Every conceivable test</td>
<td>Bank balance</td>
</tr>
<tr>
<td>Confidence*</td>
<td>Bravado</td>
<td>Bravado</td>
<td>No sweat</td>
</tr>
</tbody>
</table>

*Applies only to surgeons.

Seven Alternatives to Evidence-Based Medicine,
Eminence-Based Medicine
Evidence-Based Medicine

Levels of Evidence (U.S. Preventive Services Task Force)

- **Level I: Randomized Control Trials** -
  Evidence obtained from at least one properly designed randomized controlled trial.

- **Level II-1: Controlled Trials** -
  Evidence obtained from well-designed controlled trials without randomization.

- **Level II-2: Cohort or Case Studies** -
  Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group.

- **Level II-3: Uncontrolled Trials** -
  Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled trials might also be regarded as this type of evidence.

- **Level III: Expert Opinion** -
  Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.
Evidence-Based Medicine

- **Level 1: Experimental Designs**
  - Randomized, controlled trials (RCT’s)
  - Systematic Reviews, Meta-Analyses
- **Level 2: Quasi-Experimental Designs**
  - Non-randomized controlled trials
  - Matched controls, Cohort comparisons, Correlation studies.
- **Level 3: Expert Consensus/Opinion**
  - Case reports, Observational studies,
  - Expert Consensus panels, Best practice guidelines
- **Level 4: Personal Communication**

RCT’s - Randomized Controlled Trials

Adapted from Mark Willenbring MD (ASAM 2006)
Efficacy-to-Effectiveness & Implementation

- The assumption that effectiveness naturally flows from efficacy research is faulty.

- The tight controls of efficacy studies limit their generalizability.

- We need more research focus on bench-to-bedside adoption, implementation paradigms, and patient acceptance.

- Although group modalities are the prevailing clinical model in the addiction field, researchers resist group treatment research because of technical difficulties with controls.
Principles of Treatment

1. Treatment Matching
2. Availability
3. Domains of Care
4. Individualization
5. Retention
6. Psycho-Social Treatment
7. Medications
8. Dual-Diagnosis Treatment
9. Medical Detoxification
10. Coercion
11. Monitoring
12. High-Risk Behaviors
13. Recidivism
1. Treatment Matching

No single treatment is appropriate for all individuals.

- Patient-Oriented, not Program-Oriented
- Chart notes should describe people.
Project MATCH (NIAAA)
16 Combinations Studied
n = 1,726 subjects
Final Results: Dec 1996

Patient Characteristics
- Gender
- Alcohol Severity
- Alcoholic Typology
- Psychiatric Severity
- Cognitive Impairment
- Conceptual Level
- Meaning Seeking
- Motivation
- Sociopathy
- High v Low Social Support

Treatment Modalities
- **TSF** - Twelve-Step Facilitation
  (not AA attendance *per se*)
- **CBT** - Cognitive-Behavioral Therapy
- **MET** - Motivational Enhancement Therapy
Project MATCH (NIAAA)

- Psych Severity + TSF = Only confirmed match
  - Patients with few or no psychological problems had significantly more abstinent days with TSF than CBT

- All modalities produced less drinking and fewer consequences.

- Aftercare Cohort: More aftercare patients (35%) sustained complete abstinence for a year than outpatients (19%).

- Outpatient Cohort: TSF patients did better (24%) than CBT (15%) or MET (14%).

Treatment Matching

- Crisis Intervention
  - SBI RT
  - Detoxification

- Inpatient Rehabilitation, “Minnesota Model”
  - 28 Day Programs discredited as a universal intervention (Miller & Hester, Amer Psychologist, 1986)
  - ASAM Patient Placement Criteria:
    Hospitalization is necessary for some individuals.

- Outpatient Care
  - Self-Help Programs, Faith-Based Programs
  - Professional Care (Individual + group + monitoring)
  - Adjunctive Medications
    - Opioid agonists,
    - Amethystic medications for alcohol relapse mitigation,
    - Psychiatric meds as indicated)
2. Availability

Treatment needs to be readily available.

- Treatment motivation may be fleeting, and reducing barriers to immediate access is essential.

- Never waste a perfectly good crisis.
3. Domains of Care

Effective treatment attends to multiple needs of the individual, not just his or her drug use.

- McLellan et al. have identified 7 domains in the Addiction Severity Index (ASI)
  - **ASI Domains**: Alcohol, Drugs, Medical, Psychological, Family, Employment, Legal.
- Smoking is *the* major comorbidity in addicts.
4. Individualization

An individual’s treatment and services plan must be assessed continually and modified as necessary to ensure that the plan meets the person’s changing needs.

- **Trends in Addiction Health Care:**
  - Reimbursement tied to evidence-based practices,
  - Reimbursement tied to downstream outcomes
  - Potential lists of “approved” or “effective” interventions.

- **Joint Commission**
  - Measurable goals, Specific objectives, Individualized interventions.
5. Retention

Remaining in treatment for an adequate period of time is critical for treatment effectiveness.

- Dropout Intervention and F/U
- Good retention predicts good outcomes.
- Compliance is repeatedly a predictor of good outcome ...even in medication studies.
6. **Psycho-Social Treatment**

Counseling (individual and/or group) and other behavioral therapies are critical components of effective treatment for addiction.

- Twelve-Step Programs (AA) and Twelve-Step Facilitation (TSF)
- Cognitive-Behavioral-Therapies (CBT)
- Group and Individual Counseling/ Psychotherapy
<table>
<thead>
<tr>
<th>PSYCHOSOCIAL TREATMENTS</th>
<th>FIRST LINE TREATMENTS at least as effective as other bona fide active interventions or treatment as usual (TAU)</th>
<th>ADDED EFFECTIVENESS AS ADJUNCTIVE INTERVENTIONS in combination with pharmacotherapy and/or other first line psychosocial treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interventions (alphabetical)</td>
<td>Alcohol</td>
<td>Opioids</td>
</tr>
<tr>
<td>Behavioral Couples Therapy</td>
<td>++ +</td>
<td>N/A</td>
</tr>
<tr>
<td>Cognitive Behavioral Coping Skills Training</td>
<td>++ +</td>
<td>N/A</td>
</tr>
<tr>
<td>Community Reinforcement Approach</td>
<td>++ +</td>
<td>N/A</td>
</tr>
<tr>
<td>Contingency Management / Motivational Incentives</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Motivational Enhancement Therapy (MET)</td>
<td>++ +</td>
<td>N/A</td>
</tr>
<tr>
<td>Twelve-Step Facilitation (TSF)</td>
<td>++ +</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Slide: Daniel Kivlahan, PhD from VA/DoD Guideline [www.healthquality.va.gov](http://www.healthquality.va.gov) (a work-in-progress)

+++ Based on meta analysis / systematic review of comparisons with bona fide alternative interventions.
++ or ++ Based on one (+) or more (++) individual trials in comparison with bona fide alternatives.
+/- Evidence inconsistent across outcomes.
? Benefit questionable.
N/A Evidence not available.
Twelve-Step Groups

Myths

- Only AA can treat alcoholics
- Only a recovering individual can treat an addict
- 12-Step groups are intolerant of prescription medication
- Groups are more effective than individuals because of confrontation
Twelve-Step Groups

- **Facts**
  - Available 7 days/week, 24 hrs/day
  - Work well with professionals
  - Primary treatment modality is *fellowship* (identification)
  - Safety and acceptance predominate over confrontation
  - Offer a safe environment to develop intimacy
7. Medications

Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.

- **Alcohol:** Naltrexone, Disulfiram, Acamprosate, Topiramate?
- **Opiates:** Naltrexone, Methadone, LAAM, Buprenorphine
- **Stimulants:** [None to date, ?Modafinil?, ?Topiramate?, ?Disulfiram?]
- **Nicotine:** Nicotine replacement (gum, patches, spray), bupropion, varenicline
**Myth of Self-Medication**

- **Doctors** seek to treat deeper, more fundamental disorders. *(Koch’s postulates)*
- **Patients** are sure they drink or use drugs to cope better. *(Common sense)*
- **Logical Theory** and appealing to all, but unsupported by outcomes/evidence
- Shared pursuit of deeper cause = **Therapeutic Misalliance**
8. Dual-Diagnosis Treatment

Addicted or drug-abusing individuals with co-existing mental disorders should have both disorders treated in an integrated way.

- Depression, Suicidality
- Psychoses, Paranoia
- Pain Disorders & Analgesic Rx’s
- Violence, Domestic Abuse
- V-Codes (homelessness, unemployment, legal problems, family disorders)
9. Medical Detoxification

Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use.

- High post-detoxification relapse rates
- Not a definitive intervention, a preparatory intervention for further care
Co-Dependency
Withdrawal Syndrome

When will he be able to sit up and take criticism?
10. Coercion

Treatment does not need to be voluntary to be effective.

- Court-Ordered Probation, Proposition 36 in California
- Family or Employer Sanctions
- Medical Consequences & Physician Advice
11. Monitoring

Possible drug use during treatment must be monitored continuously. Lapses to drug use can occur during treatment.

- **Body Fluid Toxicology Testing**
  - Randomization
  - Frequency
  - Feedback
- **Alcohol Metabolite Testing (EtG, etc)**
- **Breathalyzer**
- **Prescription Medication Call-Back**
- **Collateral Information (family, etc)**
Outcomes & Measurement-Based Care

- Know the difference between *Efficacy* and *Effectiveness*
- Establish standardized baseline measures
  - Include non-drug factors such as family life, employment, etc.
  - Cost-offset measures
- Assess treatment response periodically
  - Initial *vs* interim *vs* completion *vs* long-term followup
  - Need releases of information completed for collaterals.
- Poor initial treatment response → Change plan
- Quality improvement interventions for consistently mediocre results.
BAM: Brief Addiction Monitor (A Work-In-Progress)

- 17 items - 5 minutes to complete
- Pilot study in Philadelphia, administered to 150 patients at intake
- Repeated 3 months later
- Initial analyses indicate:
  - Sensitive to change
  - Composed of 3 reliable factors:
    - Substance use
    - Risk factors for use
    - Pro-recovery behaviors,
### Brief Addiction Monitor (BAM) Items

<table>
<thead>
<tr>
<th>Substance Use</th>
<th>Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any alcohol use</td>
<td>Physical health</td>
<td>Self-efficacy</td>
</tr>
<tr>
<td>Heavy alcohol use</td>
<td>Sleep problems</td>
<td>Self-help</td>
</tr>
<tr>
<td>Drug use</td>
<td>Mood/Angry/Upset</td>
<td>Religion/spirituality</td>
</tr>
<tr>
<td>Craving</td>
<td>Risky situations</td>
<td>Work, school</td>
</tr>
<tr>
<td></td>
<td>Family/social conflict</td>
<td>Income/Housing</td>
</tr>
<tr>
<td></td>
<td>Satisfied with Recovery</td>
<td>Social supports for recovery</td>
</tr>
</tbody>
</table>
12. High-Risk Behaviors

Treatment programs should provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases, and counseling to help patients modify or change behaviors that place themselves or others at risk of infection.

- **Education & Assessment**
  - High Risk Sexual Behavior
  - Needle-Sharing Behaviors
  - Environmental Exposure Risks

- **Medical Followup**
  - Hepatitis serologies in needle-users
  - Smoking cessation!
13. Recidivism

Recovery from drug addiction can be a long-term process and frequently requires multiple episodes of treatment.

- Relapses Precede Stable Recovery
- Natural History of Alcoholism (Vaillant)
- Harm-Reduction Approaches

- “Doing Research”
This problem warrants more research.
Relapse Prevention

- Triggers, Cues
- Abstinence Violation Effect (Marlatt)
- Slips vs. Relapses

- The Wish that Never Dies
  - *When I am strong enough I will be able to drink/use in control...like other normal people.*
Self-Control

- Addicts seek control, not abstinence
Prochaska’s Stages of Change Model

- Precontemplation
- Contemplation
- Preparation
- Action
- Maintenance
“The more senior the colleague, the less importance he or she placed on the need for anything as mundane as evidence. Experience, it seems, is worth any amount of evidence. These colleagues have a touching faith in clinical experience, which has been defined as ‘making the same mistakes with increasing confidence over an impressive number of years.’ The eminent physician's white hair and balding pate are called the “halo” effect.”

Seven Alternatives to Evidence-Based Medicine, David Isaacs and Dominic Fitzgerald, BMJ: Vol 319, Dec 1999.
Banys’ Phase Model of Recovery

Shame, Guilt, Grief
Treatment of Depression
Interpersonal Emphasis
Insight

Phase 0: Crisis
Structure, Frequent Meetings
CBT, Relapse Prevention
Behavioral Emphasis
Compliance

Phase 1: Abstinence

Phase 2: Sobriety

Phase 3: Recovery

Progression
Regression/Relapse
Passage Through Phases

- Progression
  - Attendance
  - Task-completion, not time
  - Relapse prevention
    - Triggers
    - People, places, things

- Regression
  - Non attendance leads to termination
  - Incomplete requirements = phase stasis
  - Relapse
    - Slip vs. relapse question
Phase 0 - CRISIS

- A “Wet” or Drug-Using Phase
- Problem-Solving and Alliance-Building
  - Formulate the psychosocial crisis
  - Assist the patient in getting out of trouble (for the price of compliance)
- Detoxification
  - Structure is key element
  - “Your drugs or mine, not both”
Phase 1 - ABSTINENCE

- Illusion of/Wish for Self-Control
- Cognitive-Behavioral Interventions
- Relapse Prevention
- Compliance and Imitation
- Task Completion, not “Motivation”
- Structured Program Requirements
  - AA, Twelve-Step Groups
  - Education Groups
  - Specialized Groups (Seeking Safety, Anger Management, PTSD, etc.)
  - Homework
Abstinence

- Strictly speaking, abstinence is developed, not recovered.

- It is an abnormal condition, signifying an internal defect (disease).

- Addicts want to be “normal,” that is, using drugs in control.
Phase 2 - SOBRIETY

- Tolerance of Feelings
  - Grief and loss
  - Depression
  - Self-Hatred, Self-Disgust
  - Remorse and Guilt
Insight

- True insight is a relapse risk
  - Inventory of damage done
  - Emotional turmoil
  - Despair
  - Self-Hatred
    - Acted out
    - Projected onto therapist, who, in turn acts it out as harsh confrontation or contempt
How useful is insight?

- All addicts seek the “underlying causes” of their addiction in therapy

- Their unconscious fantasy is that insight will reestablish “normality”

- Normal people, “normies,” drink or use drugs in moderation
Phase 3 - RECOVERY

- First Fully Interactional and Psychodynamic Phase of Treatment
- Emphasis on Relationships
- Impediments to Intimacy
- Personal Integrity
Elements of Treatment

- Safe Detoxification
- Engagement in Recovery
- Relapse Prevention
- Treatment of Co-Morbidities
- Harm-Reduction Services