

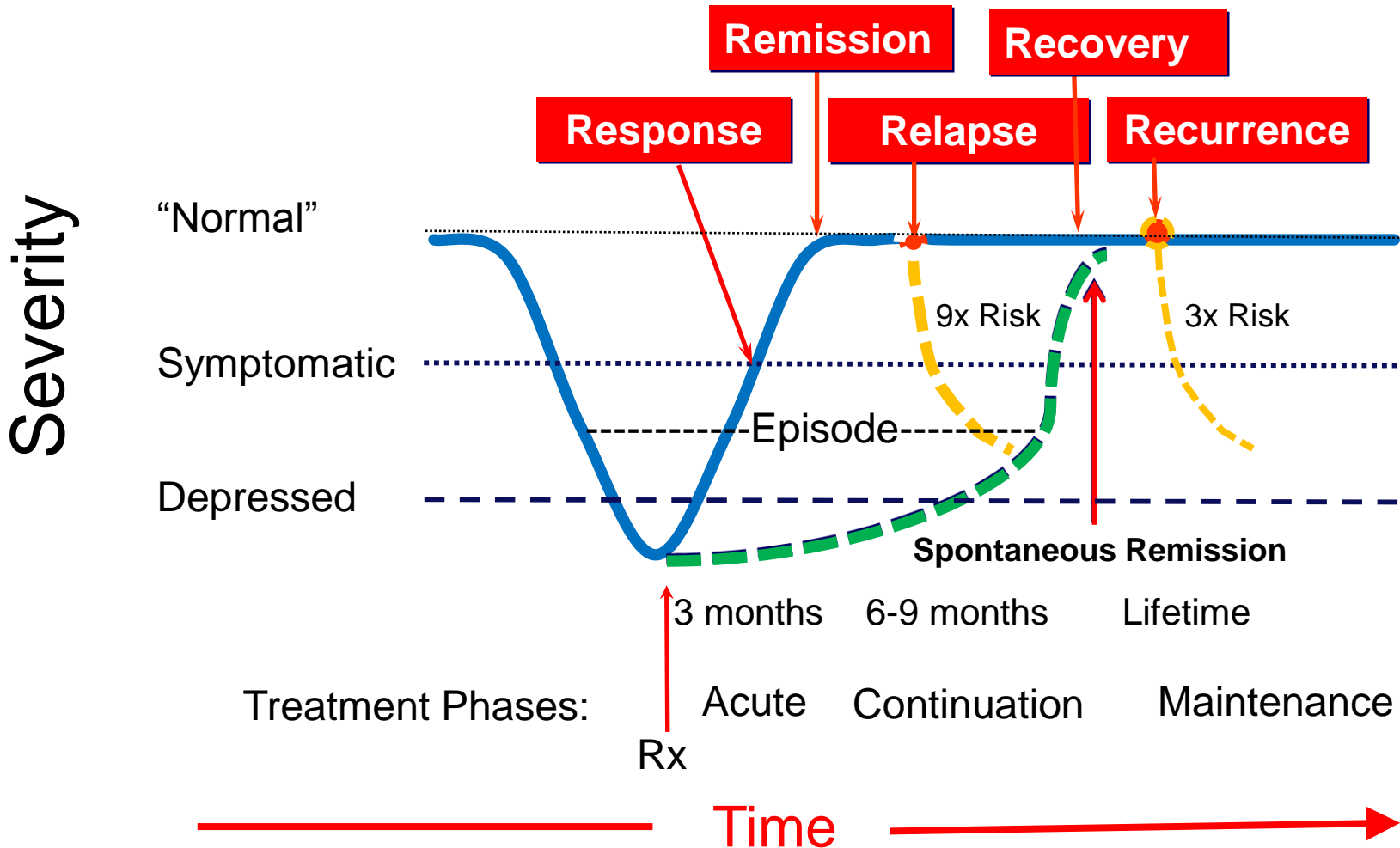
Treatment of Mental Illness

Lecture 41

The “5 Rs” of Mental Illness

(Also Known as the “Kupfer Curve”)

After Kupfer & Frank (1991), as Modified by Hollon (2005)



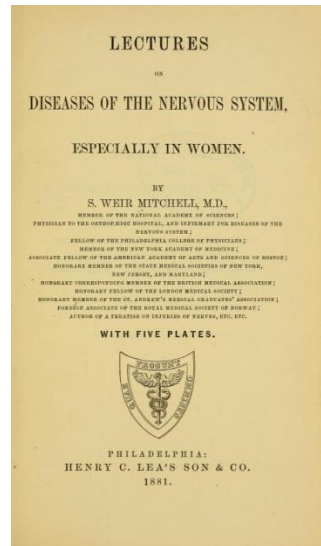
Intervention in Psychopathology

- Diathesis-Stress Framework for Etiology
- Implications for Intervention
 - Eliminate/Reduce Diathesis
 - Eliminate/Reduce Stressors
- Complete Cures Eliminate *Pathology*
 - Not Enough to Suppress Symptoms
 - Address *Both* Diathesis and Stress
- In Absence of Cure
 - Amelioration of Symptoms
 - Enhance Coping with Chronic Condition

Passive Treatment of Mental Illness

Grob (1973, 1994)

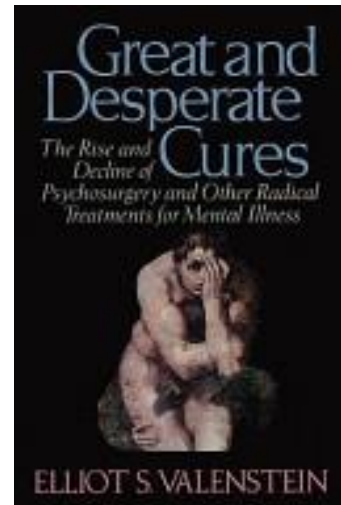
- Custodial Care
 - “Warehousing” the Mentally Ill
 - Pennsylvania Hospital (1751)
 - New York Hospital (1771/1791)
 - Virginia Asylum (1769/1786)
- The “Rest Cure”



Active Treatment of Mental Illness

Grob (1973, 1994)

- **Psychotherapy** (Breuer & Freud, 1893-1895)
 - Correct, Cope with Psychological Deficits
 - Alter Maladaptive Mental Functions, Contents
 - Change Maladaptive Behavior
- **Biological Therapy**
 - Correct Presumed Biological Disorder
 - Psychosurgery (Moniz, 1935)
 - Electroconvulsive Therapy (Meduna, 1934)
 - **Medications**
 - Thorazine (Chlorpromazine, 1950)
 - Librium (Chlordiazepoxide, 1957)



Drug Treatments for Schizophrenia

- Major Tranquilizers

- Phenothiazines

- Thorazine, Stelazine, Prolixin, Mellaril
 - Decrease dopamine levels

- Butyrophenones

- Haldol

- Thioxanthenes

- Navane

- “Atypical” Antipsychotics

- Clozaril, Risperidal, Zyprexa, Abilify



drugs.com

Drug Treatments for Depression

Also Used for Anxiety Disorder

- Tricyclic Antidepressants

- Tofranil, Elavil, Sinequan

- Increase Norepinephrine, Serotonin

- MAO Inhibitors

- Nardil, Parnate

- MAO deactivates Norepinephrine, Serotonin

- Selective Serotonin Reuptake Inhibitors

- Prozac, Zoloft, Paxil, Celexa

- Increase Serotonin Levels at Synapse



Drug Treatments for Anxiety Disorder

Also Used for Phobias, Panic Disorder, Depression

- Barbiturates
 - Nembutal, Seconal
- Propanediols
 - Miltown, Equanil
- Benzodiazepines
 - Librium, Valium, Xanax
- “Atypical” Anxiolytics
 - Buspar



A “Pharmaceutical Revolution” in Mental Health?

- Effectiveness
 - Symptom Relief
 - De-Institutionalization
- Theoretical Relevance
 - Supports roles for neurotransmitters
 - Phenothiazines, Schizophrenia, Dopamine
 - Tricyclics, Depression, Monoamines
 - Benzodiazepines, Anxiety, GABA
 - Attack Biological Bases of Psychological Deficits
 - (At least in theory)



Andrew Hickey

“Empirical” Drug Treatments

Poolsup et al. (2000); Smith & Farah (2011)

- Lithium Carbonate for Bipolar Disorder



- Paradoxical Effect of Ritalin for ADHD
 - Paradoxical Effect of Amphetamine
 - “Smart Pills”: Cognitive Enhancers for Everyone?



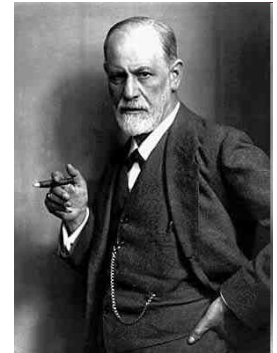
Problems with Pharmacotherapy

- Side Effects
 - “Parkinsonism”, Tardive Diskinesia
 - “Dry Mouth”, Other Annoyances
- Lack of Specificity
 - SSRIs, Depression and Anxiety
 - Placebo Effects
- Do Not Cure the Illness
 - Relapse if Medication Discontinued
 - Help Manage Chronic Illness
 - Analogy to Insulin for Diabetes?

Psychotherapy

Breuer & Freud (1893-1895); Freud (1915-1917, 1933)

- “The Talking Cure”
 - Essentially Educational in Nature
 - Acquire New Beliefs, Behaviors
 - Through Learning, Reflection
- Change Person’s Mental States
 - Beliefs, Feelings, Desires
- Change Behavior



“Hysterics Suffer from Reminiscences”

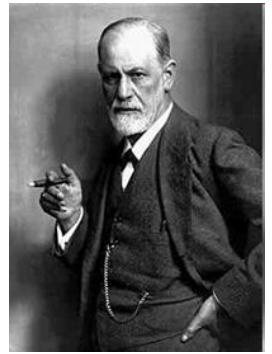
Breuer & Freud, *Studies on Hysteria*” (1893-1895)

Pharmacotherapy and Psychotherapy Compared

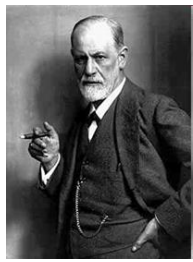
- Pharmacotherapy
 - Attempts to Alter the Mind *Indirectly*
 - By Altering the Chemistry of the Brain
- Psychotherapy
 - Attempts to Alter the Mind *Directly*
 - Through Learning, Thinking

Classical Psychoanalysis

A. Freud (1936); Horney (1945); Sullivan (1953)



- Unconscious Conflicts
 - Primitive Sexual and Aggressive Impulses
 - Conflict with Reality, Morality
- Defenses Against Anxiety
 - Repression
- “Return of the Repressed”
 - Symptoms of Neurosis
- Insight Into Unconscious Motives



Psychodynamic Psychotherapy

A. Freud (1936); Horney (1945); Sullivan (1953)

- “Neo-Freudian” Psychoanalysis
- Insight-Oriented
 - Unconscious Conflicts
 - In “Real World”
 - Defenses Against Anxiety
 - Based in Reality Not Fantasy
 - Relationships with Parents
- Interpersonal Therapy

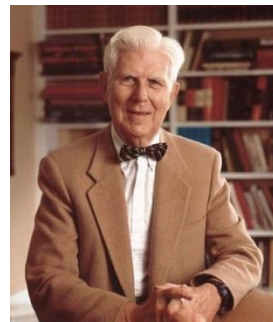


Cognitive-Behavioral Psychotherapy

Wolpe (1958); Ellis (1962); Beck (1967)

- Behavior Therapy
 - Behavior Modification
 - Focus on Symptom Modification
 - “The Symptoms *Are* the Disease”
 - Symptoms as Learned Behaviors
- Cognitive Therapy
 - Change Maladaptive Thoughts, Beliefs

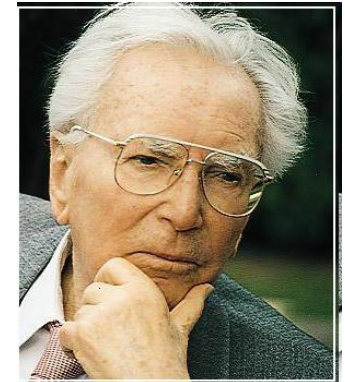
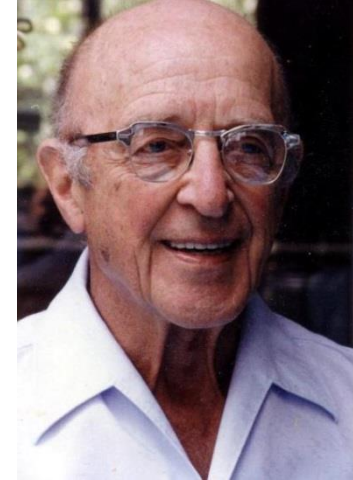
Focus on “Here and Now”
vs. “There and Then”



“Humanistic” Psychotherapy

Rogers (1951); Frankl (1959)

- Existential Therapy (Logotherapy)
 - Meaning in Life
- Client-Centered Therapy
 - Non-Directive
 - Unconditional Positive Regard
 - Self-Actualization (Maslow)



“Patient” as “Client”

Exposure Therapies

Wolpe (1958); Stampfl (1967)

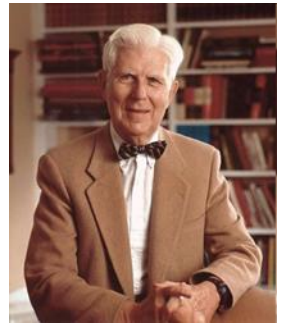
- Systematic Desensitization
 - Graded Exposure to Feared Object
- Implosion Therapy (Flooding)
 - Highest Level of Exposure
 - Prevent Normal Coping Responses
- Alleviation of Anxiety
 - Extinction
 - Acquisition of Adaptive Coping Behaviors





Cognitive Restructuring

Ellis (1962); Beck (1967)

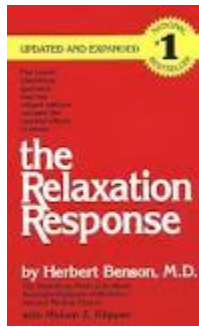


- **Alter Depressogenic Schemata**
 - Negative Beliefs About Self, World, Future
 - Arbitrary Inference
 - Selective Abstraction
 - Overgeneralization, Magnification, Minimization
 - Persuasion; Arrange Success Experiences
- **Alter Depressogenic Attributional Style**
 - Lead to Helplessness, Hopelessness
 - More Realistic Causal Attributions



Relaxation Therapies

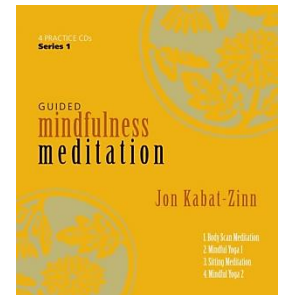
Benson (1975)



If You Can't Remove the Stressor...

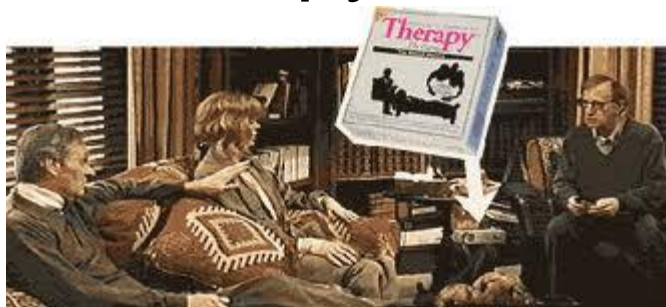
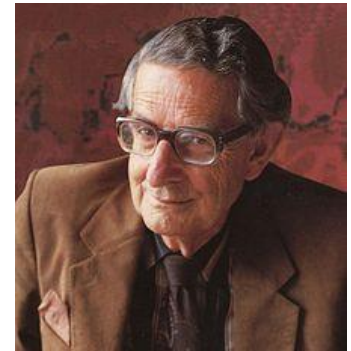
Change the Response!

- Relaxation Training
 - Modify Autonomic Responses to Stress
- Meditation (“Transcendental” or “Mindful”)
- Biofeedback
 - Electromyogram
 - Electrocardiogram



But Does Psychotherapy Work?

- The “Woody Allen Bugaboo”
- Eysenck’s 1952 Review
 - Psychoanalysis
 - Other Psychodynamic Approaches
- Pharmacotherapy



Evidence-Based Practice

Institute of Medicine (2001); McFall (1991); Chambless & Ollendick (2001)

- Modeled on Evidence-Based Medicine
 - Stimulated by “Managed Care”
 - Test Traditional Beliefs, Practices
 - Evaluate Innovative Treatments
 - Randomized Clinical Trials for Drugs
 - Comparison with Placebo, “Standard of Care”
- Objective, Quantitative Assessment
- Comparison Group
 - No Treatment, Placebo
 - Traditional Practice, “Standard of Care”





Effectiveness of Psychotherapy (Compared to Untreated Controls)

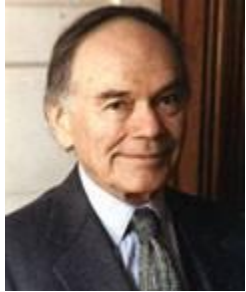


Smith & Glass (1977); Smith et al. (1980)

<u>Treatment Type</u>	<u>%ile</u>
Psychodynamic	75
Gestalt	72
Client-Centered	71
Transactional Analysis	74
Systematic Desensitization	85
Behavior Modification	77
Cognitive-Behavioral	88

Effectiveness of Psychotherapy: Is a “Dodo Bird” Verdict Warranted?

Luborsky et al. (1975)



Alice’s Adventures in Wonderland

(Lewis Carroll, 1865)

Caucus-Race

**“Everyone has won
and all must have prizes”**



Comparisons of “Effect Size”

Cohen (1977)

- Difference between mean outcomes
 - Expressed in Standard Deviation (SD) Units
 - An Effect Size of 1.0 means that the average subject in the experimental group scored **1 SD** higher than the average subject in the control group
- Classification of Effect Sizes
 - Small $d = .20$
 - Medium $d = .50$
 - Large $d = .80$

Psychotherapy Comparison Revisited

Smith & Glass (1977); Smith et al. (1980)

<u>Therapy Type</u>	<u>Effect Size</u>
Humanistic	.63
Psychodynamic	.78
Behavioral	.91
Cognitive-Behavioral	1.24
Cognitive	1.31

Psychotherapy Comparison Revisited

Weiss & Weisz (1995), Children and Adolescents

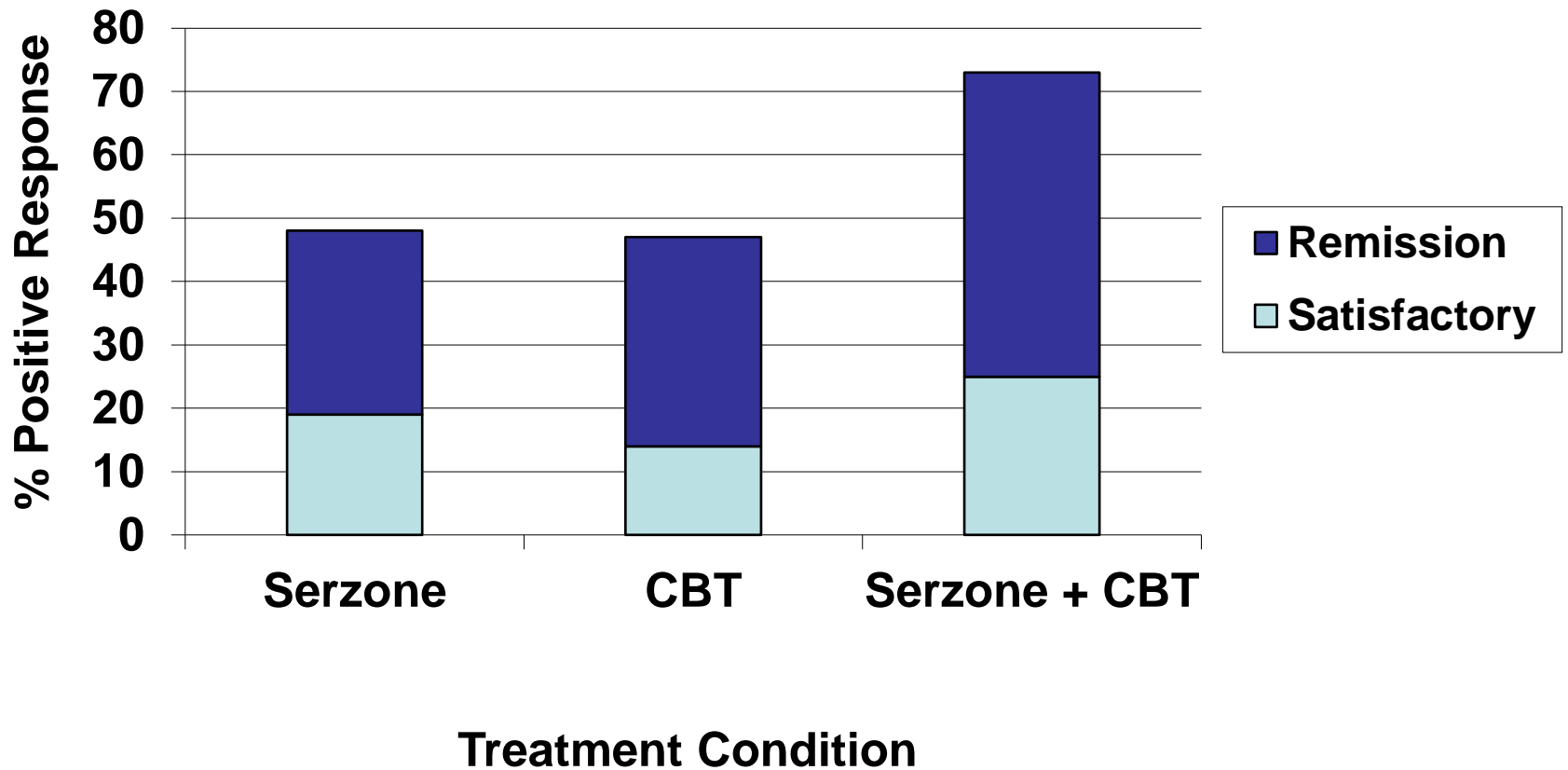
<u>Therapy Type</u>	<u>Effect Size</u>
Non-Behavioral	.42
Behavioral	.85

All Psychotherapies Are *Not* Created Equal

- Specificity
 - “Treatment of Choice” for Particular Syndromes
- Efficiency
 - Cost-Benefit Analysis
- Cognitive-Behavioral Therapy
 - The Standard of Care

Psychotherapy and Pharmacotherapy for Depression

Keller et al. (2000)



Why Combinations Might Work Best

- Drug Effects
 - Rapid Symptom Relief
 - Correct Underlying Biological Substrates
 - Effects of Withdrawing Drugs
- Psychotherapy Effects
 - Coping Skills
 - Deal with Illness
 - Adjust to Life Post-Recovery
 - Learning Lasts Longer than Drugs



Edward S Curtis
"The Smelt Fisher, Trinidad Yurok" (1923)

Give a Man a Fish.... Teach a Man to Fish....