Biomedical Therapies

• *Psychotherapeutic Drugs
  – Antianxiety Drugs
  – Antidepressants
  – Antipsychotics
Traditional Antianxiety Drugs

Best known = benzodiazepine tranquilizers
• Examples: Librium, Valium (diazepam), Xanax (alprazolam)
• These depressant drugs decrease anxiety disorder symptoms and treat insomnia.
• But: can impair memory; interact with alcohol; can cause dependency at higher doses or with longer use
• NEW: anxiety disorders can also be treated with “antidepressants” with fewer risks.
Antidepressants

• 3 main categories of meds for major depression – all increase 5HT and/or NE, but in different ways
• 2 older groups (Tricylics & MAO-inhibitors) - effective but have troublesome side effects & can be lethal if misused
• Newest group (Selective Serotonin Reuptake Inhibitors (SSRIs) like Prozac) most widely used - equally effective, less annoying side effects, & almost suicide-proof
• Antidepressants take ~4-6 weeks to produce their effects
• 65-70% show significant improvement
• These drugs can also improve anxiety disorders
• Best known treatment for bipolar disorder: Lithium Surprisingly anticonvulsants are an effective alternative.
• Sometimes a combination of meds is necessary.
Antipsychotics/Neuroleptics

• Older “typical” antipsychotics like the phenothiazines (example: Thorazine (chlorpromazine)) or Haldol (haloperidol)
• Block DA receptors in all brain areas
• Effective, especially for the “positive” symptoms, but frequently produce serious motor problems:
  – Parkinson’s disease-like symptoms
  – Tardive dyskinesia (uncontrollable involuntary movements of the face with extended use)
Newer “Atypical Antipsychotics”

• Examples: Clozaril (clozapine), Risperdal (risperidone)

• Block DA receptors only in thought/emotion areas

• Much less risk of motor problems

• Improve both + & - symptoms; help many who had not responded in past

• But: not risk-free; may cause seizures or blood disorders in some, diabetes or weight-gain in others
Biomedical Therapies

• *Psychotherapeutic Drugs
  – Antianxiety Drugs
  – Antidepressants
  – Antipsychotics

• Electroconvulsive Therapy (~100,000 patients/yr) for depression

• Psychosurgery (at least 300/year)
Insight Therapies: Psychoanalysis

• Goal: Help patient gain insight into unconscious conflicts that are causing psychological problems
• Techniques to reveal the unconscious:
  – Free association, watching for resistances
  – Dream interpretation
  – Analysis of “Freudian slips”
  – Watching for transference
• Psychoanalyst is the expert, interpreting the meaning of your dreams, your words, & actions
Changes in Psychoanalysis

• Traditional psychoanalysis could take years (~600 sessions)
• Today psychodynamic therapy is more likely to be
  – More directed
  – Shorter term (25-30 sessions)
  – Have a broader focus than Freud’s
Remember Carl Rogers and his Self Theory

• Belief in human potential
• Importance of self-concept
• Self-actualizing tendency
• Individual’s problems can arise from
  – Differences between real self and ideal self
  – Failure to move toward self-actualization
  – Over dependence on positive regard from others
• How can a therapist help?
Rogers and Therapy

- Known for his views about the therapeutic relationship:
  - "the client knows what hurts, what directions to go, what problems are crucial, what experiences have been buried"
- This lead to a “non-directive” therapeutic attitude very different from psychoanalysis
- One of 1st to systematically analyze therapy
Client-Centered Therapy

• Therapist is not an expert, but an empathetic, genuine, supportive listener to help clients accept themselves & recognize their potential

• Therapist provides *unconditional positive regard* & “reflects back” or restates what client says

• Experience of being listened to & valued gives us the freedom to grow

• In a supportive setting client has capacity to make choices/changes to move towards self-actualization

• Therapist must help clients take responsibility

• [http://www.youtube.com/watch?v=Ew8CAr1v48M](http://www.youtube.com/watch?v=Ew8CAr1v48M)
Cognitive Therapies

- Focus on changing faulty, negative thinking, irrational beliefs and expectations, cognitive distortions

- 2 examples:
  - Aaron Beck - Cognitive Therapy for Depression – gentle questioning to make client aware of their negative thinking
  - Albert Ellis - Rational Emotive Therapy – confrontational attack on irrational beliefs

http://www.youtube.com/watch?v=45U1F7cDH5k&fe
Ellis’s A-B-C Theory of Emotional Distress

- **Activating Event - Beliefs – Consequences**

“...My approach to psychotherapy is to zero in as quickly as possible on the client’s basic philosophy of life; get him to see exactly what this is and how it’s self-defeating; and to persuade him to work his ass off, cognitively, emotionally, and behaviorally, to profoundly change it...”
<table>
<thead>
<tr>
<th>Irrational Beliefs That Can Contribute to Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is a dire necessity for an adult to be loved or approved by virtually every person in his or her community.</td>
</tr>
<tr>
<td>2. If one is to consider oneself worthwhile, one should be thoroughly competent, adequate and achieving in all possible respects.</td>
</tr>
<tr>
<td>3. Certain people are bad, wicked or villainous and should be severely blamed and punished for their villainy.</td>
</tr>
<tr>
<td>4. It is awful and catastrophic when things are not the way one would very much like them to be.</td>
</tr>
<tr>
<td>5. Human unhappiness is externally caused, and people have little or no ability to control their sorrows and disturbances.</td>
</tr>
<tr>
<td>6. If something is or may be dangerous or fearsome, one should be terribly concerned about it and should keep dwelling on the possibility of its occurring.</td>
</tr>
<tr>
<td>7. It is easier to avoid certain life difficulties and self-responsibilities than to face them.</td>
</tr>
<tr>
<td>8. One should be dependent on others and need someone stronger than oneself on whom to rely.</td>
</tr>
<tr>
<td>9. One’s past history is an all-important determiner of one’s present behavior; because something once strongly affected one’s life, it should indefinitely have a similar effect.</td>
</tr>
<tr>
<td>10. One should become quite upset over other people’s problems and disturbances.</td>
</tr>
<tr>
<td>11. There is invariably a right, precise and perfect solution to human problems, and it is catastrophic if this perfect solution is not found.</td>
</tr>
<tr>
<td>12. One should be comfortable and without pain at all times.</td>
</tr>
<tr>
<td>13. The world should be fair and just.</td>
</tr>
</tbody>
</table>
Behavior Therapies

• Takes a learning theory approach: Maladaptive behaviors were learned & can be replaced by new learned responses.

• Uses principles of operant conditioning, classical conditioning, and observational learning to modify behaviors & improve functioning.

• Some operant examples of “behavior modification”
  – reinforcement of desired behaviors
    • Token economies (e.g. to change behavior of ADHD kids)
  – extinction (stop reinforcement) of undesired behaviors
  – [link](http://www.youtube.com/watch?v=MCyfMFXR-n0&mode=user&search=)
Systematic Desensitization & Exposure Therapy (see also p 207)

• **Systematic desensitization**: a) Learn relaxation techniques, b) Create a stimulus hierarchy related to your phobia, c) Work thru the hierarchy, using relaxation techniques to change your response to successively more frightening stimuli. May use imagined stimuli or real (“in vivo”) stimuli.

• **Exposure therapy** - repeatedly expose client to feared stimuli so they gradually adapt (fear response extinguishes)

• New variation: virtual reality exposure therapy

• **Aversion therapy**: decrease a behavior by creating a negative physical response through classical conditioning:
<table>
<thead>
<tr>
<th>Situation</th>
<th>Subjective Units of Distress</th>
<th>Avoidance Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giving a presentation to my English class</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Going up to bat when I play softball</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>Talking to an attractive girl</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>Talking about myself</td>
<td>75</td>
<td>90</td>
</tr>
<tr>
<td>Making a phone call in front of someone else</td>
<td>65</td>
<td>80</td>
</tr>
<tr>
<td>Coming late to class and walking in front of other students</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Unexpectedly seeing someone I know</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Small talk with counter people at the coffee shop</td>
<td>35</td>
<td>50</td>
</tr>
</tbody>
</table>

Cognitive-Behavior Therapies

• An integrated therapy combining verbal interventions to change client’s way of thinking, with behavior modification techniques to also bring about changes in behavior.
Psychotherapy Overview

• ~10 million/yr treated, but even more untreated
• 68% of therapists take an **eclectic approach**
• Analysis of >1500 research studies looking at the effectiveness of psychotherapy for various disorders:
  – Psychotherapy significantly better than no treatment
  – 75% improve within 6 months
  – No single approach was most effective overall
  – All therapies depend on client-therapist relationship
• Cog-behav therapy was more effective than talk therapy for phobias, panic, OCD, depression and insomnia.
Basic Procedures for Modifying Your Own Behavior:

• Monitor one’s own behavior; identify behaviors that need to change
• Set specific goals (begin with small, easier changes & build to harder ones)
• Learn to reinforce yourself for meeting goals.
• Imitate or “model” desired behaviors; practice, practice, practice.