Psychological Disorders

Chapter 2
Historical Perspectives

Outline/Overview

- Early approaches to abnormality
  - Animism/Demonology
  - Physical Causes
  - Emergence of Reason
  - Hospitals/Asylums Emerge
- Modern approaches
  - Organic Approach
  - Psychological Approach

Early approaches to abnormality

- Animism/Demonology
  - everyone and everything has a soul
  - evil spirits possessed an individual
  - responsible for their behavior
  - get rid of spirits (trephining)

- Paradigms – framework for understanding
Physical causes
- Hippocrates (400 BC) imbalances in four vital humors (fluids that flow throughout the body)
- Hysteria
  - disorder found predominantly in women
  - felt to result from a wandering uterus
  - Greek for uterus (hystera)
- Galen (200 AD)
  - first to consider physiological and psychological causes

Demonology Returns (500-1350 AD)
- Church very powerful
  - Abnormal behavior struggle between God & Satan
  - Medical views largely ignored
- Animalism
  - similarities between animals and mad people
  - unable to control themselves
  - violence without provocation
  - live under terrible conditions
- Physicians and Clergy charged with driving out invaders

Reason emerges
- 1500’s – Johann Weyer – first physician to specialize in mental illnesses
  - believed that the mind could be “sick” like the body
- Weyer used kindness as treatment
- many physicians considered madness treatable
- used the standard treatments of the day
  - bloodletting, purging, and forced vomiting
Hospitals/Asylums
- housed all of societies outcasts
- insane received the worst treatment
- origins as debtors prisons
- St. Mary’s of Bethlehem (Bedlam) one of the worst
- late 1700’s chains generally removed
- more humane conditions began to arise
- became common

Hospital/Asylum Reformers
- Philippe Pinel (1793) Paris
- William Tuke (1796) Founded York Retreat
- Early 1800’s
  - Benjamin Rush – Pennsylvania Hospital
  - Dorothea Dix – helped establish 32 state hospitals
- By late 1800’s moral treatment approach had started to decline – Why?

19th & Early 20th Century Perspectives
- The Organic View
  - Abnormal functioning has physical causes
- The Psychogenic Perspective
  - Abnormal functioning has psychological causes
Organic Approach

- Two factors responsible for re-emergence:
  - Emil Kraepelin’s textbook argued that physical factors (like fatigue) lead to mental dysfunction
  - Biological discoveries (like untreated syphilis, Richard von Krafft-Ebing)
  - Many useless treatments emerged

Models of abnormality

- Organic model
  - biochemical malfunction or physical abnormality
  - group symptoms into a syndrome
  - try to establish etiology of the syndrome

Sources of abnormality

- Neuroanatomy
- Biochemistry
- Genes
- Germs (virus/bacteria)
  - biological treatment is sought – usually drugs
  - lobotomies, insulin coma, shock
Germs

- schizophrenia – long thought a possibility
- general paresis and syphilis
- after symptoms were thoroughly described search for a cause began
- connection w/syphilis difficult to make
  - syphilis often preceded paresis by as much as 30 years
  - serious stigma, powerful motivation to deny
  - overt symptoms quickly disappear

Richard von Krafft-Ebbing

- 1897 injected nine paresis patients who denied ever having the disease
- none developed sores
- soon a drug was developed
- penicillin made “nuisance disease”
- encouraged medical world to view mental illnesses as diseases of the body, like any other
- Unfortunately, no others thus far

Genetic causes

- Schizophrenia
  - twin studies have established genetic component
    - identical - concordance rate of about 50%
    - fraternal - about 10% (same as siblings)
  - clearly a genetic component
  - not genetically determined
  - diathesis-stress model
- personality traits with genetic components
  - IQ, mental speed, D&A abuse, well-being
Other causes

- **Biochemical causes**
  - Schizophrenia and dopamine
    - Antipsychotics block dopamine receptors
  - Depression and serotonin
    - SSRI's prevent serotonin being reabsorbed
  - Mania and lithium
    - Blood levels closely monitored.

- **Neuroanatomy**
  - Tumors, brain injury or trauma
  - Increased ventricle size in schizophrenia
  - CAT, PET, MRI, fMRI scans investigate brain structure and functioning.

Psychogenic Approach

- **Franz Anton Mesmer**
  - Obstructed flow of "animal magnetism"
  - He fixated his gaze and touched with iron rod
  - Elaborate placebo effect

Jean Martin Charcot

- **Neurologist**
- Mid-late 1800's
- Used hypnosis to distinguish genuine physical symptoms from those with a hysterical basis
Josef Breuer
- late 1800's
- talk about problems and fantasies under hypnosis
- become very emotional
- on emerging from hypnosis, felt much better
- catharsis

Sigmund Freud
- studied under Charcot
- worked with Breuer
- therapeutic effects could be obtained without hypnosis
- emotional catharsis
- psychoanalysis

Current directions/trends in treatment
- 1950s – Psychotropic medications discovered
  - Antipsychotics
- Led to deinstitutionalization and a rise in outpatient care
  - Problems?
  - Corrections system / Homelessness
- Payment arrangements
  - Managed care / Parity laws
Biological Treatments

- Schizophrenia - antipsychotics - thorazine (chlorpromazine 1st antipsychotic)
  - enabled the discharge of many individuals from hospitals
  - serious side effects (tardive dyskinesia)
- Depression - MAO inhibitors - severe diet restrictions
  - tricyclics - less toxic, still serious side effects
  - SSRI’s - better side effect profiles, minimal toxicity.
- Bipolar - lithium carbonate OD can cause heart failure
- Anxiety - benzodiazepines effective short term, long term dependence/tolerance - safe
- ECT/Psychosurgery

Evaluation of biomedical model

- Strength: large body of research supports the heritability of many disorders and traits
- Weaknesses: general paresis - only condition proven to result from a physical illness
  - heritability far less than 100%
  - nongenetic influences play a role
  - drugs only work while being taken
Scientific Study of Learning and Behavior

- Behavioral models
  - Classical conditioning
  - Operant conditioning

Behavioral Models

- Behaviorism-dominant model 1920 until mid 60’s
- Pavlov-US(food) -> UR (salivation)
- CS(bell) + US (food) -> UR (salivation)
- CS(bell) -> CR (salivation)
- acquisition-when the CR is acquired
- CS presented without the US for enough trials extinction occurs

Classical conditioning

- explanation for initiation/maintenance of phobias
- what prevents extinction?
- disorder is the symptoms
- correct the symptoms and disorder is “cured”
- flooding (or exposure)
- effective, primarily with anxiety disorders.
- systematic desensitization-anxiety hierarchy
- situations confronted
Operant conditioning

- positive reinforcer-increases probability of response preceding it
- negative reinforcer-increases probability of behavior preceding it
- punisher-decrease probability that behavior will be repeated
- operant-response whose probability can be manipulated
- treatments-selective reinforcement to shape a target behavior
- must find a reinforcer more powerful than the maladaptive behavior
- maladaptive behaviors often bring powerful reinforcers
- extinction-simply ignoring the behavior(s), removing the reinforcement.