History of Autism

Autism comes from the Greek word “autos” meaning self.

A person who is removed from social interaction- an isolated self.

Term first used by Swiss psychiatrist Eugen Bleuler in 1911

Applied to adult schizophrenia
Kanner

- Research on 11 children between 1938 and 1943
- Used the term early infantile autism
- Described a withdrawal of human contact as early as age 1
- Prior to his description of a pattern of symptoms, children were classified as emotionally disturbed or mentally retarded

Clinical Observations

- Socially remote
- Self-satisfied
- No response to physical touch
- No interactive play
- Obsession with objects
- Tantrum when activity interrupted
Clinical Observations
- Stereotypical behaviors
- Routinized behaviors
- Literal understanding of language

Parent histories
- Tracked emotional states of parents
  - High strung
  - Birth order
  - Relationships with their own parents

Treatments
- Change in home or care environment
  - Tuberculosis hospital
  - Private school placement
  - Foster home placement
Hans Asperger

Asperger

- Working independently of Kanner
- Described autistic psychopathy
- Genetically transmitted
- High language subjects with poor social skills
- Term Asperger’s Syndrome not used until 1981

Asperger’s

- Speech begins as expected
- Non-verbal communication – lack of facial expression, vocal intonation, limited gestures, comprehension of other’s expressions and gestures is poor
- Social interaction – lack of ability to understand and use the roles governing social behavior
Consider

- Speech
- Gesture
- Posture
- Movement
- Eye contact
- Choice of clothing
- Proximity to others

1940–1960

- Childhood psychosis
- Childhood schizophrenia

- Repetitive activities and resistance to change
- Motor coordination
- Skills and interests
1960-80
- Medications such as LSD
- Electric shock
- Behavior change techniques that relied on pain and punishment

Bruno Bettelheim

Bettelheim
- Traumatized unloved children retreat into autism
Bettleheim

- Freudian
- Psychoanalysis
- Refrigerator mothers

- Autism had no organic basis but resulted when mothers withheld affection and failed to bond
- Related autism to conditions in concentration camps

Attachment theory

- Based on Freud’s theories of love

- John Bowlby
  - Lasting psychological connectedness between human beings
  - Early experiences in childhood have an important influence on development and behavior in later life

Characteristics of attachment

- Proximity maintenance – desire to be near the people we are attached to
- Safe haven – returning to the attachment figure for comfort and safety in the face of fear
- Secure base – attachment figure acts as a base of security from which the child can explore the environment
- Separation distress – anxiety that occurs in the absence of the attachment figure
Milieu Therapy

- University of Chicago – Sonia Shankman Orthogenic School

- Planned treatment environment
- All aspects of the experience are considered therapeutic

- Scientific structuring of the environment in order to effect behavioral changes and to improve the individuals psychological health and functioning

Bernard Rimland
Rimland
- Father of a high-functioning autistic son
- Rejected theories of Bettelheim
- Elicited the support of Kanner
- Neurological cause
- Identified dramatic increase in incidence

Rimland
- Biomedical treatment
  - Supported vaccinations as a primary cause
    - thermisol

Defeat Autism Now
- Biomedical treatments
- Dietary intervention
- Vitamin supplements
- Many causes of autism result from an immune-system dysfunction that affects the body's ability to break down certain proteins and combat yeasts and bacteria
Chronic constipation (lack of bowel movements) and/or diarrhea (multiple daily bowel movements)
Undigested food in the stool
Frequent or smelly gas
Smelly bowel movements
Very bad breath that won’t get better despite good tooth brushing
Blunted belly/malnourished looking
Acid Reflux and/or ulcers
Night waking, especially if the child is upset/in distress
Abdominal pain
Pain before pooping
Odd positions while pooping
Laying on furniture or using hands to press against abdomen
Parasites, either now or previously
Growth Chart abnormalities – decrease in height or weight percentile
Any confirmed GI dxs such as IBD, Crohn’s

Food allergies and/or food intolerances (such as lactose intolerance)
Over the top cravings of certain foods, especially if wheat, dairy, or soy
Allergies to grasses, weeds, pollens, etc
Unexplained rashes, hives or eczema
Asthma
Red ears, or dark circles under eyes – “allergic shiners”
Worsening behaviors during allergy (pollen) season (usually spring & fall)
Repeated cases of Strep Throat
Numerous ear infections, sinus infections or other infections now or earlier
Previous treatment for yeast infections or thrush
Nosebleeds
Never getting sick with common viruses or the flu
Frequently sick as a young child, and then never sick after that others

Worsening of behaviors over time despite being in quality therapy programs
Inability to get to sleep or stay asleep
Heavy snoring or frequent night waking
Adenoid and/or Tonsil enlargement/removal
Excessively Sweaty/Sweaty Heads
Excessive Mouthing or Sucking of Items, and/or Teeth Grinding
Super Human, lift a car off a person strength
Lymph Gland Problems
Thyroid Problems
Immune System Issues
Auto-Immune Diseases
Cancer
- Potential exposure to environmental toxins, here or in birth country
- Mercury (silver) dental fillings
- Reactions to vaccines such as high fevers, swelling at injection site, high pitched screaming, etc.
- Vaccines given while child was sick, underweight, on antibiotics, or after Tylenol was administered
- Double vaccinated both here & in birth country
- Vaccinated here under an accelerated program in order to get the child quickly "caught up"
- Regression shortly after a certain set of vaccines
- Being ill with Roseola close to the time of MMR and/or Chicken Pox vaccine

### Supplements
- Vitamin B6 and Magnesium – pyridoxine – nutrient found in fish, meat and bananas
- DMG – metabolic enhancer
- TMG – trimethylglycine – may influence neurological functioning
- Digestive enzymes – help break down gluten (grains) and casein (milk protein) products
- Gluten-free diet
- Casein-free diet

### Supplements
- Methyl B12 – methylcobalamin – brain and nervous system function and regulation of immune system
- Hyperbaric oxygen – oxygen at a pressure level higher than the atmosphere – increase oxygen to the brain
- Chelation – remove heavy metals
- IVIG – intravenous immunoglobulin – affects immune deficiencies
Drugs

- Anti-psychotics
- Antiepileptics
- Anti-depressants
- Anti-anxiety
- Benzodiazepines (sedatives)
- Beta blockers – aggression of hyperactivity
- Opie blockers – self-injury
- Stimulants

Drugs

- Secretin – hormone – neurotransmitter that controls digestion
- Benedryl - allergies
- Risperdal – anti-psychotic
- Prozac – depression or compulsive behaviors
- Ritalin - hyperactivity
- Nystatin – anti-fungal
Lovaas History

- Behavior modification techniques using aversives
- Electric grate

Applied behavior analysis

- Principles of behavior analysis designed to change behavior is a precisely measurable and accountable manner
- Defining assumption is that behavior is learned and controlled by contingencies in the environment

Discrete trial

- An instruction stated as concisely as possible
- Response might be correct, or considered partial success, noncompliance or unresponsiveness
- A consequence is provided – positive for correct, negative for incorrect
- An inter-trial interval
Lovass

• Demonstrated success with early intervention

Criticism
Overstated claims (cure)
Use of negative reinforcement
Intensity and duration of therapy
Replication difficulty for parents
Theories of Autism

- Theories of child variance
- Theory of mind

Theories of Child Variance

- Psychodynamic
- Biophysical
- Sociological
- Ecological
- Behavioral

Psychodynamic

- Focus on individuals and their internal motivation.
- How does the individual see his or her life and behavior?
Psychodynamic intervention

- Help individuals understand their needs and express them in socially acceptable ways.
- Psychotherapy
- Counseling
- Play, music, art therapy

Biophysical

- Physiological nature and condition of the human organism.
- Heredity
- Developmental variance
- Accidental body damage

Biophysical treatments

- Drugs
- Alterations of diet
- Correction of biochemical imbalances
- Surgical operations
Sociological

- Focus on society and the groups within society.
- Consider existing social patterns.
- Deviant behavior results from forces in society rather than individual pathology.

Sociological treatments

- Changes in the larger system
- Examples: compensatory education, bilingual education, racial integration, delabeling
- Adapt instruction to meet the needs of deviant individuals and subgroups.

Culture

- Family
- Ethnic or racial group
- Religious group
- Profession
- Social groups
### Ecological
- Considers the individual and the environment with equal concern.
- Behavior results from the interaction of characteristics of the individual and factors in the setting.

### Ecological interventions
- Change the behavior
- Change the environment
- Change the perceptions
- Eclectic in that strategies from other models might be employed.

### Behavioral
- Considers behavior and the conditions surrounding its occurrence.
- How often it occurs?
- What event precedes it?
- What event follows it?
Behavioral

- Internal motivation is of less concern.
- A behavior is either appropriate or inappropriate for a particular setting.

Behavioral interventions

- Behavior modification
- Applied behavior analysis
- Positive behavior support

Traditional positions

- There are standards of behavior to which children should conform.
- Children who do not conform are a problem to themselves and to others.
Traditional

- Teachers must intervene to solve behavior problems indirectly (by modifying the environment) or directly (by modifying the child).
- The purpose of education is to prepare children to deal with the reality of the outside world.
- Be good citizens.

Non-traditional

- No standard of behavior is innately more desirable than any other.
- Children should be free to choose their own mode of behavior.
- Reality is socially constructed rather than objectively existing apart from human experience.

Theory of Mind

- Primary representation – things as they really are.
- Metarepresentational deficits – which are used in pretending.
- Mindblindness - inability to infer the mental state of another.
Theory of Mind

- Orienting to social stimuli
- Social referencing (awareness of the emotional state of others, mimic parent's reaction to situations)
- Theory of Mind – others have thoughts that are different from one's own
The False Belief Test
Executive function theory

- Ability to maintain an appropriate problem-solving set for attainment of a future goal
- Executive function deficit – inability to disengage from an object
- Inability to inhibit a previously rewarded response
- Lack of joint attention behaviors