Understanding and Treating Self-Injurious Behavior

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- Published *Infantile Autism* in 1964
  - Discredited Bettelheim’s parent blaming theory
- Founded the Autism Society of America in 1965
- Founded the Autism Research Institute in 1967
- Head consultant to the movie, *Rain Man*
Autism Research Institute

- Conducts and sponsors research
- Networks scientists, physicians, therapists, and parents
- Provides parents with relevant science-based information to help understand and treat their children.
ARI: Research and Info Dissemination Throughout the Years

- 1960s to 1980s
  - Behavior modification (ABA), nutrition, and diet

- 1990s
  - Sensory and biomedical interventions

- 2000s
  - Began an initiative on adults on the spectrum
Research

- Funds research studies
  - Mostly biomedical research
  - Whole body tissue bank – University of Maryland / National Institute for Child Health and Human Development
  - GI depository - Massachusetts General Hospital (Boston)
  - Specimen Control bank – Pfieffer Treatment Center, Chicago
- Sponsors at least two Think Tanks annually
- Sponsors a private Internet discussion group for researchers and experienced physicians
- Publishes a quarterly science (hardcopy) newsletter, *Autism Research Review International*
Connecting with Parents

- ARI webinars
  - Biomedical, education, behavior, sensory, adult
- Information resource call center
  - 866.366.3361
  - Yahoo discussion groups
    - Biomedical, older children/adults, recovered/near recovered
- International outreach
  - This year (2014): Ghana, Moscow, Ukraine
Severe Behaviors

- Inward
  - Self-injurious behavior
- Outward
  - Severe tantrums
  - Destructiveness
  - Aggression
Functional Analysis

- Define Behavior
- Data Collection
  - Frequency
  - Duration
  - Severity
Functional Analysis

- Context
  - Day of Week
  - Time of Day
  - Environment

- Antecedents/Consequences
  - Overall Condition (e.g., anxiety)
  - Physical/Social Environment
Physiological Reasons

- Genetic
  - Example: Lesch-Nyhan syndrome
Physiological Reasons (cont.)

- Biochemical
  - Anti-Psychotics
    - Haldol, Mellaril, Thorazine
  - Serotonin Antagonist
    - Risperidone / Risperdal
  - Beta endorphins
    - Naltrexone
Naltrexone

Self-injury \(\rightarrow\) Releases beta-endorphins

- Anesthetic feeling
- Pleasure
Physiological Reasons (cont.)

- Nutrition-Related
  - Low Blood Sugar
  - Vitamin/Mineral
    - Low calcium levels
      - Vitamin B6 with Magnesium
      - Dimethylglycine (DMG)
  - Food Allergies/Food Sensitivities
Physiological Reasons (cont.)

Physiological Reasons (cont.)

- Anxiety/Overarousal
  - Deep Pressure
  - Exercise
  - Relaxation Techniques/Quiet Area
- Underarousal (Hypo, Passive)
  - Rigorous/Vigorous Exercise
  - Keep Busy
Physiological Reasons (cont.)

- Head Pain
  - Middle Ear Infection
  - Migraines
- GI-related Pain
  - Reflux
  - Gas, bloating
Physiological Reasons (cont.)

- Sensory-related Stress
  - Vision – tinted lenses
  - Auditory – ear protectors, auditory intervention
  - Tactile – deep pressure, tactile stimulation
- Reaction to Chemicals – remove chemicals
Social Reasons

- Poor Receptive Language
  - Does not understand what is expected of him/her, leading to frustration
  - Functional communication
    - Simultaneous communication
Social Reasons

- Obtain Tangibles
- Obtain Positive/Negative Attention
- Escape Attention
- Behavioral Cycles
Self-Injury Behavior Before and After Social Intervention

Mean number of self-destructive acts for each 15-second interval before and after staff intervention.
Suggestions

- Functional analysis
  - why, who, where, what, when, how
- Avoid reasons to delay program
- Active programming
More Suggestions

- Interrupt behavior before it escalates

- Rarely will behavior be eliminated
  - less intense/severe, less frequent