EARLY INTERVENTION IN AUTISM: Forging the Architecture for Change

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Why Early Intervention?

- “Critical window of opportunity” for children 0-6 years of age
- Brain has high degree of plasticity
- Providing intensive intervention during these early years leads to a higher degree of independence and overall maximized outcomes
Benefits of Early Intervention

- Statistics show that between 25 and 50% of children receiving intensive EI will move into general education by Kindergarten.

- Many others will need significantly less service provision in future years.
Diagnosis: The First Step

- Researchers have all shown that autism can be reliably diagnosed by 18 months.
- Many symptoms are present by 12 months of age.
- Average age of diagnosis is 6 years for Caucasian children and even higher for children from minority backgrounds.
Diagnosis: The First Step

- Modified Checklist for Autism in Toddlers (M-CHAT) can reliably screen for the earliest warning signs
- Takes less than 5 minutes to administer
- Less than half of pediatricians surveyed in 2004 used screening tools, even after parents raise their initial concerns
Diagnosis: The First Step

- Average time from parent’s initial concern to full diagnosis is 4 years
- That is 4 years potentially spent without intervention
- Early screening can and does lead to early diagnosis
- Developmental screenings need to become mandatory
Diagnosis: The First Step

- Currently no consistency in how a diagnostic evaluation is done

- “Best Practices” in diagnosis recommend Autism Diagnostic Inventory (ADI) & Autism Diagnostic Observation Schedule (ADOS)

- But most clinics, state agencies and even private practitioners do not use these tools
Effective Early Intervention

- General consensus on the factors contributing most to program effectiveness
- Important: “ONE SIZE DOES NOT FIT ALL”
- Programming must be individualized & implemented in a flexible manner
- Entry into program should begin as soon as diagnosis is given
Effective Early Intervention

- CA Best Practices:
  - Based on current research & effective practices
  - Uses a variety of methodologies & approaches
  - Based on comprehensive assessment results
  - Reflective of individual needs
  - Outcome based
  - Includes parents as part of multidisciplinary team
Effective Early Intervention

- Most important factor is intensity
  - Time
  - Individualization of curriculum
  - Level of structure in the environment

- According to most “Best Practice Guidelines”- intervention should occur between 25 and 40 hours a week.
Effective Early Intervention

- In a classroom setting, must have a low student to adult ratio (2:1 preferred)

- Curriculum should be behaviorally-based and developmentally sequenced

- Empirical evidence supports the use of Applied Behavior Analysis techniques:
  - Discrete Trial Training
  - Pivotal Response Training
  - Verbal Behavior
  - TEACCH
Effective Early Intervention

- Includes incidental teaching techniques
- Teaching takes place in various environments to ensure generalization & maintenance of new skills
- Consistency across environments
- Designed to allow for transition to more independence
Effective Early Intervention

- Data is recorded in all learning environments
- Structured, organized and distraction-free teaching areas
- Visual schedules of daily routine
  - Digital photographs
  - Generalized photographs
  - PECS icons
Effective Early Intervention

- Incorporate motor development
  - Occupational Therapy
  - Sensory Integration Therapy

- Incorporate social skills instruction
  - Floortime (Developmental, Individual, Difference)
  - Relationship Development Inventory
  - Pretend and symbolic play skills
Effective Early Intervention

- Language enriched environment
  - PECS
  - Whole Language Approach
  - Naturalistic Language Method
  - Hannon Method (More Than Words)
  - Sign

- Includes parent training and support
Young Learners Preschool

- Highly specialized, comprehensive intensive preschool intervention program
- Goal is to return to mainstream environment for Kindergarten
- Children with all forms of ASD; 3 to 6 years old
- Six hours a day, five days a week
- Incorporates a wide range of strategies shown to have efficacy for children with ASD
Young Learners Preschool

- Philosophy - “The child must not be made to fit the program, the program must be made to fit the child.”

- Teacher student ratios from 1:1 to 1:3

- Program begins with DTT to develop instructional control and intrinsic motivation

- Moves to a more naturalistic learning environment
Young Learners Preschool

- Instruction begins 1:1 until the child is ready for dyad/group learning

- Children participate in circle, art and music

- All therapies are provided during the school day
  - Speech and Language
  - Occupation/Sensory Integration Therapy
  - Adaptive Physical Education
Initial instruction focuses on teaching

- Compliance
- Communication
- Learning readiness
- Social relatedness/emotional development
- Elimination of maladaptive behaviors such as self-stimulation, self-abuse or aggression
Social and emotional development are taught through the use of DIR and RDI models.

Play skills are taught as part of the curriculum—moving from parallel play to pretend and symbolic play.

Opportunities for generalization are built into the day, and homework is given to help parents facilitate the skills at home/ in the community.
Data is kept on all learning opportunities and reviewed weekly

Children are assessed every 3 months on the ABLLS, LAP and Vineland

Assessed on ADOS at entry and again following 12 months of programming

Teachers make home visits

Parenting groups are provided
Data on AW

- Attending
- C-V Sounds
- Aggression

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Outcomes

- Over 80% of students met annual IEP goals
- In 2005; 50% of graduates entered a district-based Kindergarten program
- 20% entered special ed programs for children of average to borderline intelligence
- 7 of 10 non-verbal students acquired at least 3 functional words within 9 months