# **Autism Spectrum Disorder: Diagnosis & Management**

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Do watch videos on ASD by Dr. Suneel Godbole at chiranjeevgodbole@youtube

### "What is Autism?

Greek word 'autos' = self (McKernan and Mortlock, 1995)

"A neuro-developmental condition typically appearing in the first 3 years of life that significantly affects a person's ability to communicate, understand relationships and relate to others, & is frequently associated with unusual or stereotypical rituals or behaviors." (RPwD Act 2016)\*.

#### What we know about Autism?

- 1% of World Population. Prevalence doubled in last decade. 1 in 31 births (CDC), 1 in 68 births (India)
- Boys : Girls : 4 : 1
- The disorder is a spectrum, Uneven development in skills/abilities
- No specific cause known, No medical test for diagnosis, No objective measure for determining degree of autism, Life-long disability, No known cure, All racial, ethnic, and social classes affected
- Prognosis improves with early identification & intensive intervention
- These children have to be diagnosed on the basis of clinical suspicion and assessed by using specific scales.

### **Causes of Autism**

- Exact cause not yet known
- Genetic: Increased Risk in Siblings, Twins, Multiple genetic regions (16p11.2, 15q24, 11p12-p13), MeCP2 gene: Females Rett syndrome
- Neuropsychological: Impaired executive functioning, Deficits in theory of mind, Empathizing-systemizing personality theory
- Neurobiological: Associated with seizures, Pregnancy: thalidomide, rubella, misoprostol, valproate, MMR?, Thiomersal?, Leaky gut
- Neuropathological: Larger Brain size, Aberrant connections, Poor neuronal connectivity

### Myths about Autism: Autism is NOT...

- a mental illness
- unruly kids who choose not to behave
- caused by poor parenting
- always associated with mental impairment &/or behavioural challenges

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diagnosed by a single medical test or a brief observation

## **Diagnosis**

- Developmental evaluation, Etiologic workup, Evaluation hearing, vision
- Psychometric testing (ISAA, INCLEN, CARS, DQ/IQ, Sensory Profile, Sleep assessment, Motor tests)
- Referral to Early Intervention to Developmental Pediatrician

### **Dyad Of Impairments: DSM-V**

Children with Autism share two main areas of difficulty.

- A. Deficits in social communication (All 3 must be present in the child; for diagnosis)
  - 1. Poor social interaction / speech
  - 2. Poor eye contact
  - 3. No interactive play
- B. Repetitive behaviors, interests & activities (2 out of 4 must be present in the child; for diagnosis)
  - 1. Stereotypy: Rocking, Hand-flapping, Finger fidgeting, Spinning
  - 2. Routines, Rituals
  - 3. Fixated interests: Obsessed about fan, electric buttons, Align objects / toys
  - 4. Sensory issues: covers ears for loud sound, avoids sticky food, hair pulling, self-biting

### AND

- C. Symptoms must be present in early childhood
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning
- E. NOT obtained by Intellectual Disability (ID), Global Developmental Delay (GDD)

### **Levels of Severity**

Level 3-requiring very substantial support

Level 2-requiring substantial support

Level 1-requiring support

### **Comorbid Conditions**

 Learning Difficulties, Intellectual Disabilities, ADHD, Epilepsy / Seizures [Approximately 25-35% develop seizures], Sleep Disturbances, Hearing Impairment, Ticks, Feeding disorders, DCD

### **Management**

## **Occupational Therapy**

- Assists in developing effective everyday activities, Eating, Sleeping, Education, Work, Play
- Therapists Identify level of function, Provide therapy, Support Caregivers

### **Physiotherapy**

- Develop better coordination, muscle tone, balance
- Work on gross and fine motor skills.

## **Sensory Integration Therapy**

- Focused on developing the ability of nervous system to process sensory input. Sensory Integration
- Activities to change child's reaction to Sight, Sound, Touch, Smell, Taste, Movement & Balance

## **ABA: Applied Behavior Analysis**

Science of "behaviorism," which uses principles of learning & motivation to change behavior.

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- It looks at behavior as a 3 step process: Antecedent Behavior & Consequence.
- Consequences of what we Do affect what we Learn & what we do in the future.

### **Speech & Language Therapy**

Understanding Language, Speaking Words, Conducting a conversation, Using gestures

## **Nutritional Management**

- Food preferences Picky eater, Fixed Interests
- Oro-motor & Oro-sensory issues
- Gut Brain Axis derangement various diets
- Neuro-nutrient Supplementation
- Healthy Dietary Habits

#### **Medicines**

- No medicinal cure yet
- Useful to reduce disruptive behaviours, Sleep issues
- Treat comorbidities epilepsy, ADHD, constipation...
- Treat acute illnesses, Routine immunization, Supplements +/-

### **School selection**

Exclusion – Segregation – Integration – Inclusion

### **Classroom Management**

- Priming, Classroom routines, Academic modifications, Visual supports, Sensory & emotional regulation
- Reinforcement, Transition supports, Structured environment

### Individualized Godbole's Online Autism Learning [iGOAL] Program

- Children with Autism require 'Multidisciplinary Management' like OT, Speech, Special Education, Behavior management etc. But doing all these therapies at different centers is 'Time consuming', 'lots of distance travelling', 'costly' and definitely 'Exhaustive'.
- We believe in 'Natural Environment Training' an evidence-based training methodology; which is an individualized, stress-free, parent-mediated training program that will enable parents to train their child in the home environment.
- We believe that 'Every moment is an opportunity to train child!' and hence 'Parents are the BEST therapists for their child!'
- We also strongly believe that enjoying the stimulation of the child to communicate; gives much more results than aggressive, structured attack on 'Autism'! This means Please enjoy interacting with the 'Whole-child'; rather than 'trying to treat the Autism Spectrum Disorder'!
- Please contact 9637641404 for further details.

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