

9869405747  
Dr Kondekar  
[www.autismdoctor.in](http://www.autismdoctor.in)

# Autism basics and setting goals

**DR KONDEKAR SANTOSH, ASSOCIATE PROFESSOR NAIR HOSPITAL**

FELLOWSHIP PEDIATRIC NEUROLOGY AND EPILEPSY – MUHS,

DIPLOMA DEVELOPMENTAL NEUROLOGY CDC KERALA

[WWW.AUTISMDOCTOR.IN](http://WWW.AUTISMDOCTOR.IN)

## Diagnostic Criteria for 299.00 Autism Spectrum

### A1 A2 A3 PLUS TWO OF B WILL MAKE DIAGNOSIS

- A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive; see text):
1. Deficits in **social-emotional reciprocity**
  2. Deficits in nonverbal communicative behaviors
  3. Deficits in **developing, maintaining, and understanding relationships.**

- B. **Restricted, repetitive patterns of behavior, interests, activities, ANY 2**
1. **Stereotyped or repetitive motor movements, use of objects, or speech**
  2. Insistence on **sameness, inflexible** adherence to routines, or ritualized patterns of verbal or nonverbal behavior
  3. Highly **restricted, fixated interests** that are abnormal in intensity or focus
  4. **Hyper- or hyporeactivity to sensory input** or unusual sensory

*Specify current severity: BASED ON DEPENDENT / PARTLY DEPENDENT / INDEPENDENT*

C. Symptoms **must be present in the early developmental PERIOD**

D. Symptoms cause **clinically significant impairment in social, occupational, or other important**

E. These disturbances are **not better explained by intellectual disability (intellectual developmental disorder) or GDD**

[www. autismdr.wordpress.com](http://www.autismdr.wordpress.com)

**DSM 5**

**Actually autism is just**

**1 \*Absence of social  
reciprocation\***

**2 \*paucity of (Non verbal )  
communication\* and**

**3 \*absence of understanding  
social context or relations,\***

**To which any of the following  
two may get added as**

**\*repititive behaviour\***

**\*fixed interest\***

**\*sameness\* and**

**\*sensory issues\* .**

**\*Extremely Simple\***

**We manage each word one  
by one.**



# Universal Symptoms of Autism

All of the below symptoms must be present for a diagnosis:



Hyper- or hyporeactivity  
to sensory input



Social and communication deficits  
(verbal and nonverbal)



Fixated interests considered  
abnormal in intensity



Repetitive behavior,  
interests, or activities



Difficulties in relationship development,  
maintenance, and understanding



Attachment to sameness,  
routines, and behavior

# In Autism: Core symptoms dsm 5 A

5



www.autismdoctor.in  
1/18/2023

- ▶ Social and communication centers in brain and Sensory centers for different senses in brain, are damaged or underdeveloped due to genetic or other reasons
- ▶ This results in **child losing interest/ or not developing interest in social communication, eye contact, response to commands, social initiation / reciprocation/ imaginary play & verbal and even nonverbal conversation and develops interests in objects. As people change, objects don't, so are easy to trust.**

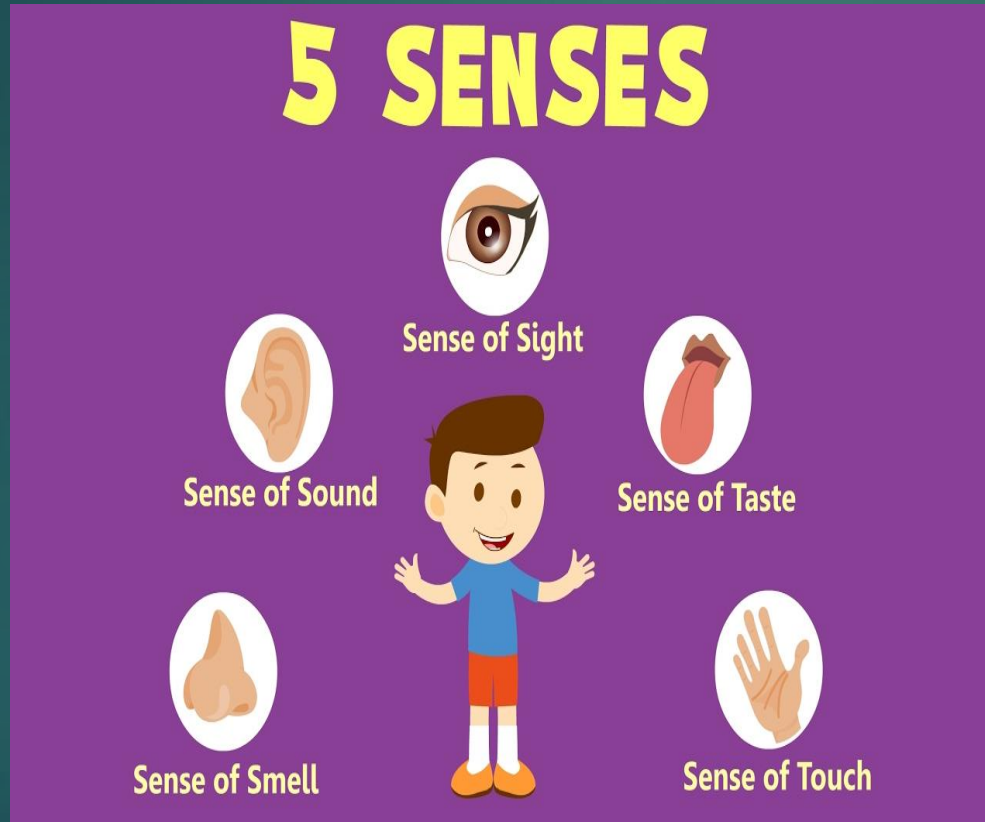
# Dsm 5 B

- ▶ With inability to communicate/ understand, the child develops
- ▶ Restricted interests
- ▶ Object fascinations
- ▶ Echolalia
- ▶ Repeated hand movements
- ▶ Fixed concepts/ ideas
- ▶ Hypo hyper sensory response
- ▶ **As a reflection of incomplete communications in brain, attempting to develop or cope up with some level of maturation of rest of the brain.**

# Sensing the senses: 5 senses

7

- ▶ vision, hearing, touch/pain/temperature, taste, smell



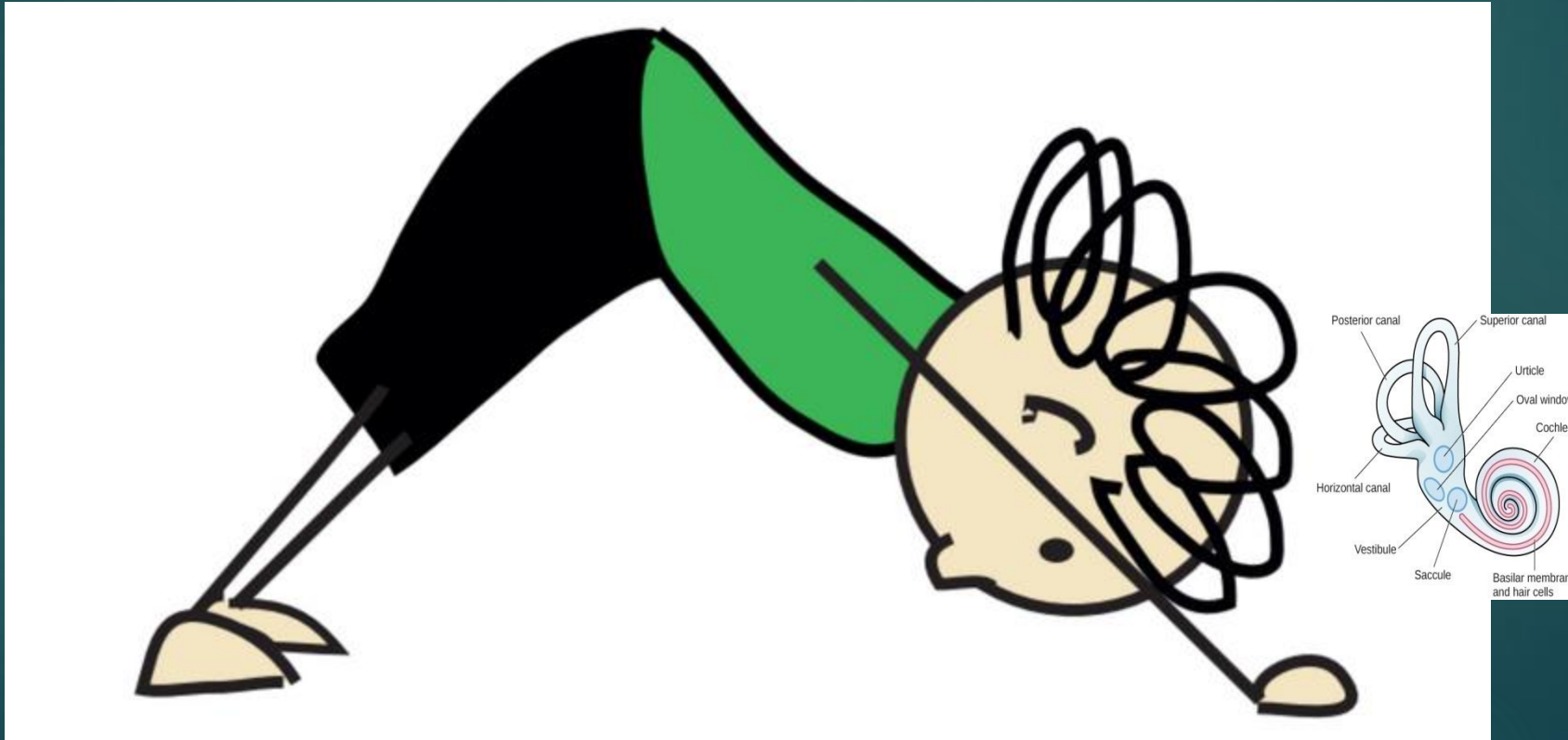
**Presents as  
hypo hyper  
or normal  
sensitivity to  
any sense  
often  
present but  
not must**

# Two special senses: Sense the Sensory

8

www.autismdoctor.in  
1/18/2023

- ▶ :vibration/ vestibular and proprioception/ balance



# Two hidden senses: Sense the Sensory

- ▶ Sense of **breathing** > >> Repeated cough
- ▶ Sense of indigestion or **gut** movements >>> indigestion constipation

## **ALL 9 SENSES, PRESENT AS LOW OR HIGH RESPONSE**

LOW RESPONSE: IF CENTRAL PROCESSING AFFECTED **SPD**

HYPER RESPONSE IF PERIPHERAL INPUT PERCEPTION more AFFECTED

## **Sensory Diversion**

AND THERE IS 10<sup>TH</sup> SENSE, sense of cognition-recognition , if low, kids have low IQ

BEING A SPECIAL / HYPER INTELLECTUAL , THOUGH RARE, was called Asperger or HF autism in old system

# Higher functions affected

10

- ▶ Right wrong
- ▶ Real unreal
- ▶ Imagination
- ▶ Imitation
- ▶ Abstract thoughts, thoughtfulness
- ▶ Conversation, stories
- ▶ Discussion
- ▶ Group behaviour
- ▶ Complex coordinated acts
- ▶ Sense of humor, sense of recognition
- ▶ Mathematics, complex maths

# Severity levels of autism

- ▶ There is no more mild, moderate, severe.
- ▶ Mild word is often used to keep parents happy.

## THREE FUNCTIONAL LEVELS OF AUTISM

### ASD LEVEL 1

#### Requiring Support

- Difficulty initiating social interactions
- Problems with planning and organization at times



### ASD LEVEL 2

#### Requiring Substantial Support

- Social interactions are limited to narrow special interests
- Frequent restrictive and repetitive behaviors



### ASD LEVEL 3

#### Requiring Very Substantial Support

- Severe Deficits with Verbal and Non-Verbal Communication
- Narrowly Focused and Great Distress When Changing Behaviors or Focus



Autism is considered a neurodevelopmental disorder that affects a child's behavior, social skills and ability to communicate. There are three levels of autism based around the severity of the symptoms and the level of care the individual will need.

**DRJOCKERS.COM**  
SUPERCHARGE YOUR HEALTH

# Comorbid evaluations: Can be clinical alone

T2

- ▶ Cognitive testing
- ▶ Language testing
- ▶ Adaptive function testing
- ▶ Motor assessment
- ▶ Sensory assessment vision
- ▶ Sensory assessment hearing
- ▶ Social evaluation
- ▶ Medical assessment: neuro developmental , neuro pediatric, diet, gut issues and weight
- ▶ Assessment for ADL
- ▶ Assessment for learning, attention, sitting posture, pen grip, RECEPTIVE Learning, handwriting

# The internationally recognized red flags for autism

13

## Red flags in the 1<sup>st</sup> Year

### Birth to 3 months:

- ✓ Delayed social smile

### 3 to 6 months:

- ✓ Absent cooing

### 6 to 9 months:

- ✓ No Response to name
- ✓ No mirror play

### 9 to 12 months:

- ✓ No imitation
- ✓ No Social referencing
- ✓ No Joint attention/ pointing



## Red flags in the 2<sup>nd</sup> Year

### 12 month

- ✓ Absent babble or coo
- ✓ NO gesture (point, wave, grasp, etc.)
- ✓ **Atypical behaviors:** Spinning and intense visual examination of objects

### 13-16 months

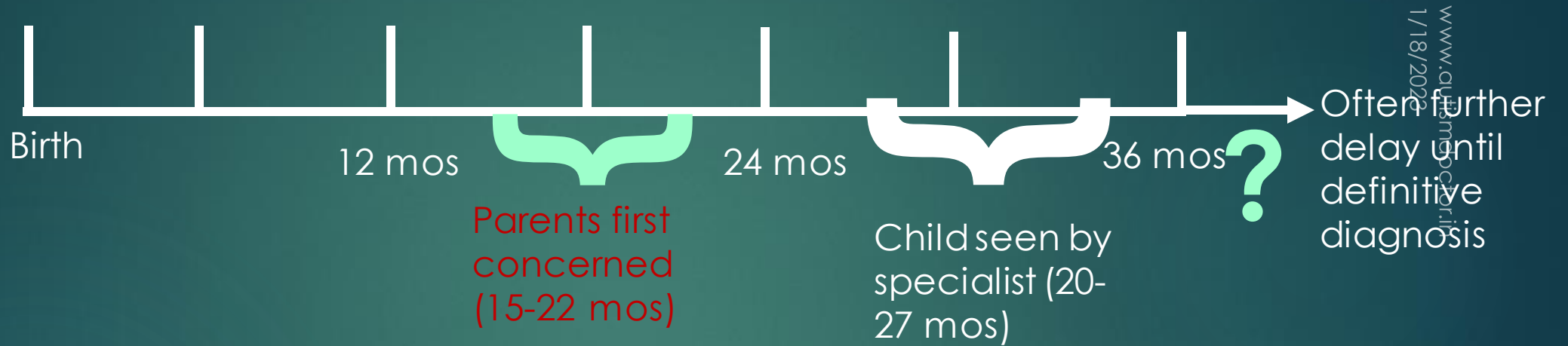
- ✓ Does not say single words

### 24 months

- ✓ no two-word phrases on his or her own (rather than just repeating what someone says to him or her)
- ✓ Has any loss of any language or social skill at any age.

# Delay in Diagnosis

14



## Misconceptions and misinformation regarding autism-

- •Autism is a western disorder. It is rarely seen in the subcontinent.
- Child will outgrow the deficit
- Many children speak by 5 yrs .....so wait and watch
- Autism affects only the rich.
- Autism is a result of poor parenting and a proper home environment can cure the child.

# Diagnosis by

15

www.autismdoctor.in  
1/18/2023

- ▶ Screening test M-chat <2 Yr age
- ▶ ISAA
- ▶ INCLIN TOOL- DSM 5
- ▶ Genetic and metabolic tests, EEG, MRI are not needed for diagnosis unless any other diagnosis is strongly suspected, or next pregnancy is planned for PNDT.

**ROLE OF PEDIATRICIAN DOESN'T END IN REFERRING,  
BUT IS MORE INVOLVED IN MAKING A DIAGNOSIS,  
GUIDING , COUNSELLING AND SETTING GOALS AND REVISING MONTHLY.**

# Its no longer a disease to be explained by

- ▶ Immunity
- ▶ Infection
- ▶ Inflammation
- ▶ Toxins
- ▶ Oxidative stress or cytokines
- ▶ Dietary deficiency
- ▶ Dysbiosis\*\* / Probiotics
- ▶ Metabolic diseases
- ▶ All above theories- it shall progress

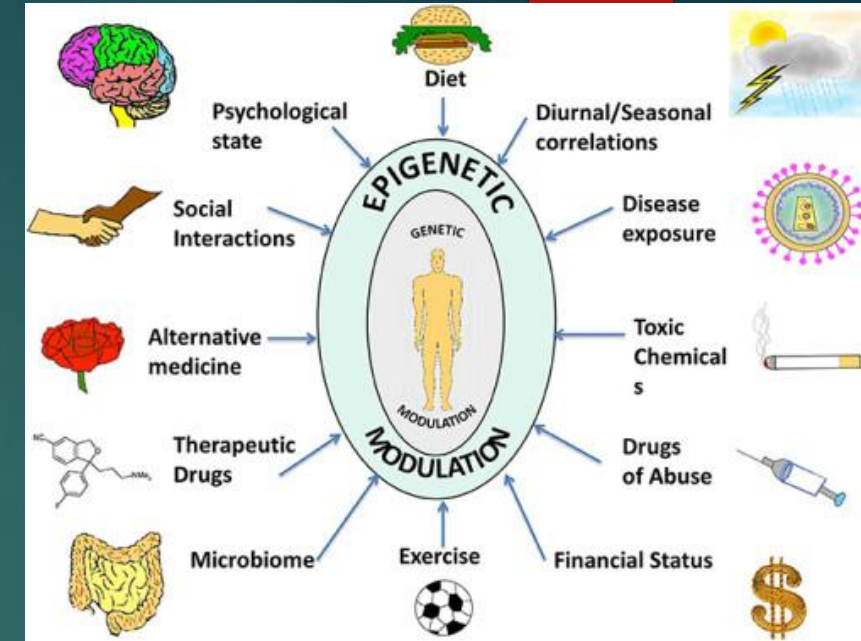
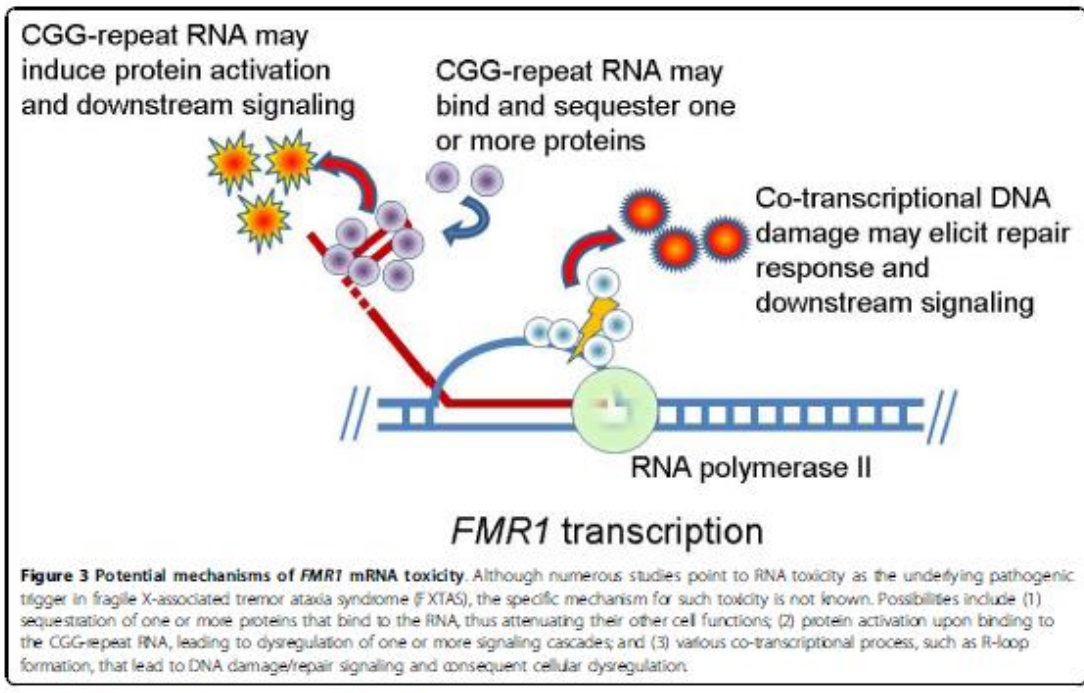
**Autism is a developmental deficit that turns into disorder due to sensory discordance, the sense is not interpreted in sensory way due to paucity of speed or connections**

# We had multiple theories

17



Every one talked about their own, but concluded in ambiguity

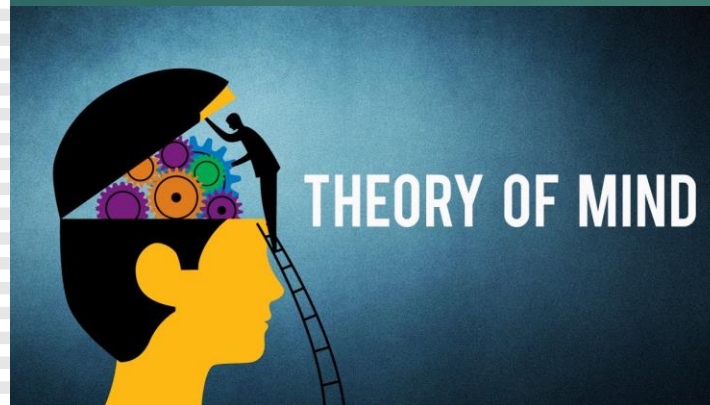
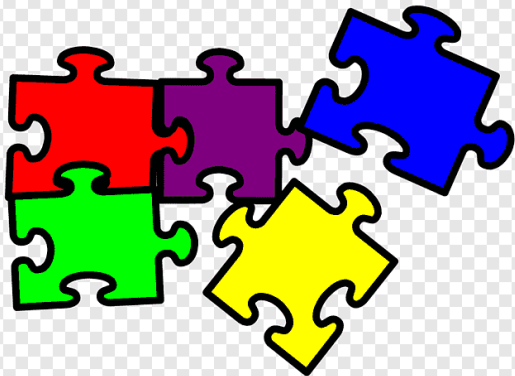


4 4

ERROR

PAGE NOT FOUND

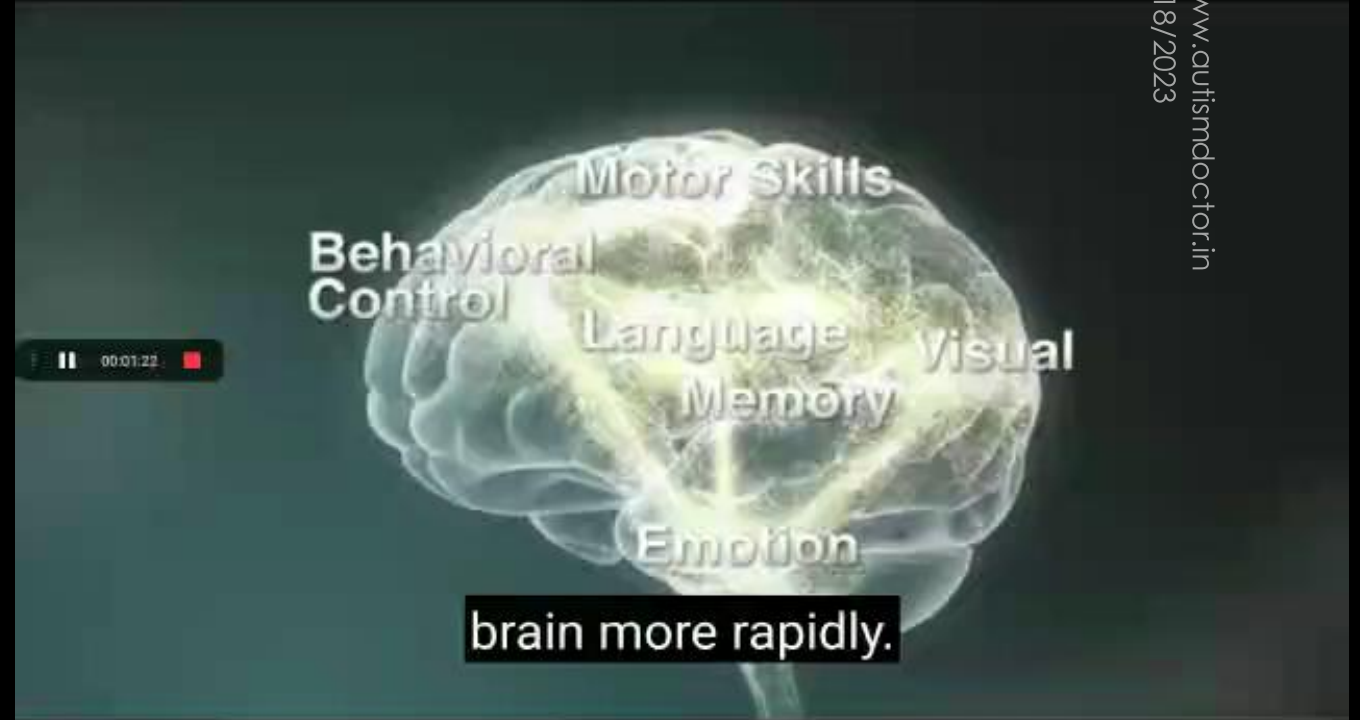
# Aetiology



After birth brain is designed to make 1000 connections per second for first 1000 days of life.

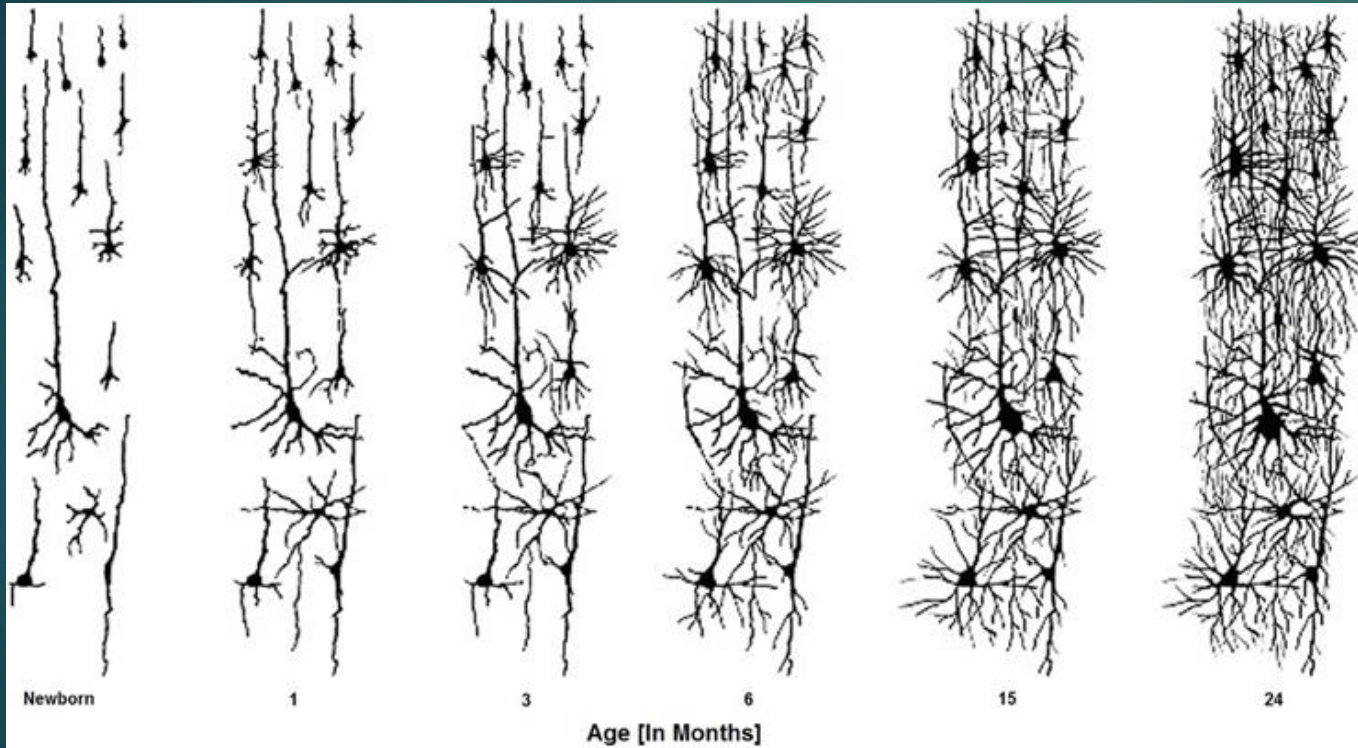
This is affected.. So new connections are not formed.

The development occurs based on previously formed connections and later it fails or regresses due to overload.



# The early years of life are an important time for active brain development and organization

20



- ▶ Learning and memory associated with multilevel brain changes
- ▶ Both dendritic development and pruning are strongly influenced by the use or disuse
- ▶ **Behavioral treatments cause changes in brain structure, function and organization in brain**

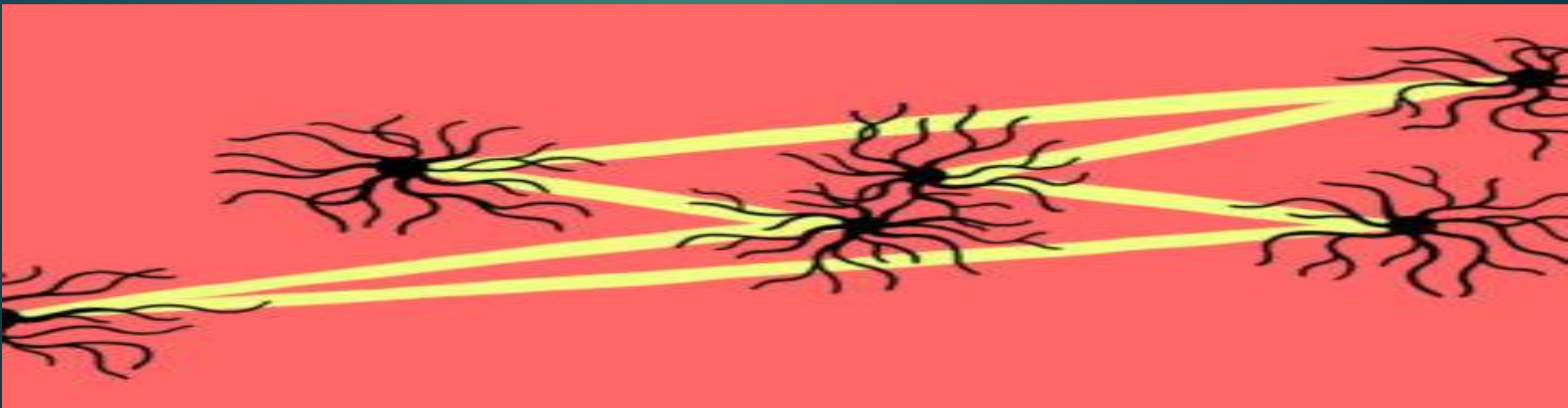
*Keller et al, 2009; Spironelli et al, 2010*

# Faulty Neuronal connections

21

- ▶ Incomplete / Under-developed / excess
- ▶ Receiver neurons, central neurons, interneurons
- ▶ Chemical, physical, functional, electrical disconnections, dissociations, disturbances

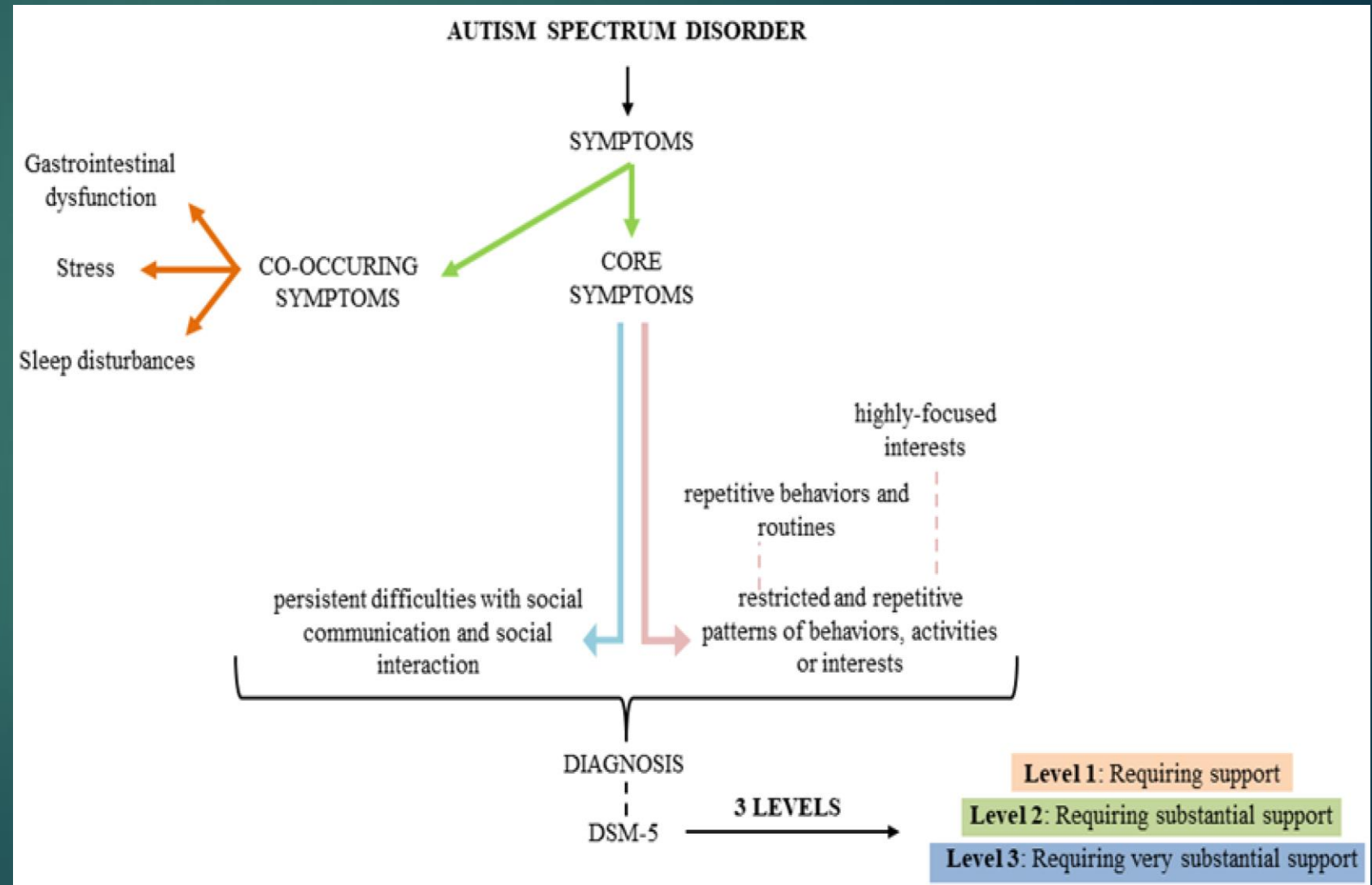
www.autismdoctor.in  
1/18/2023

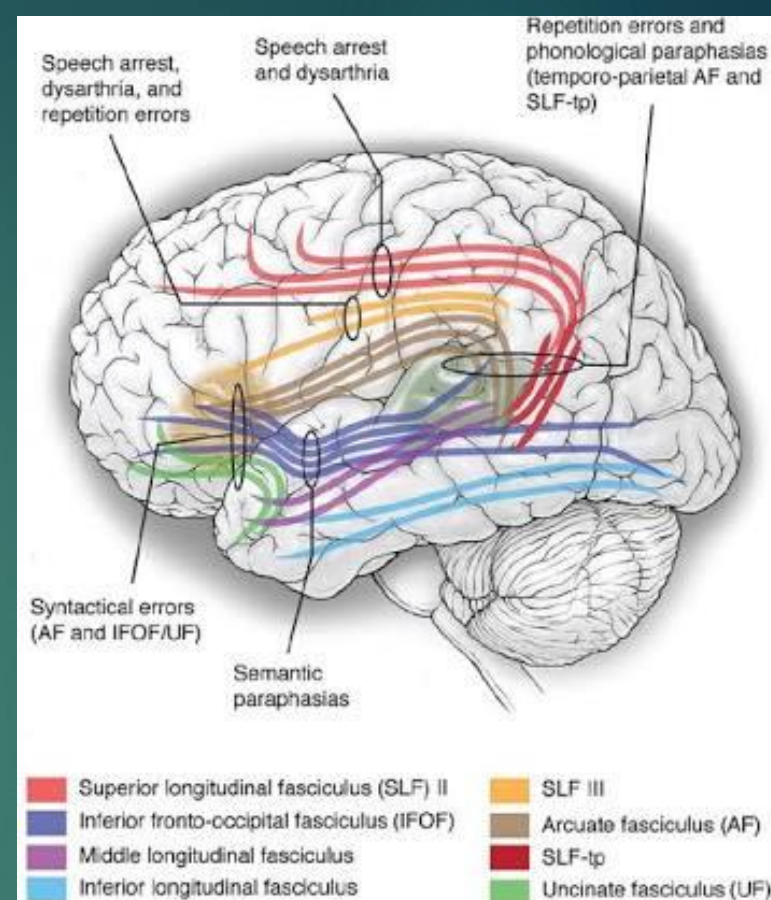
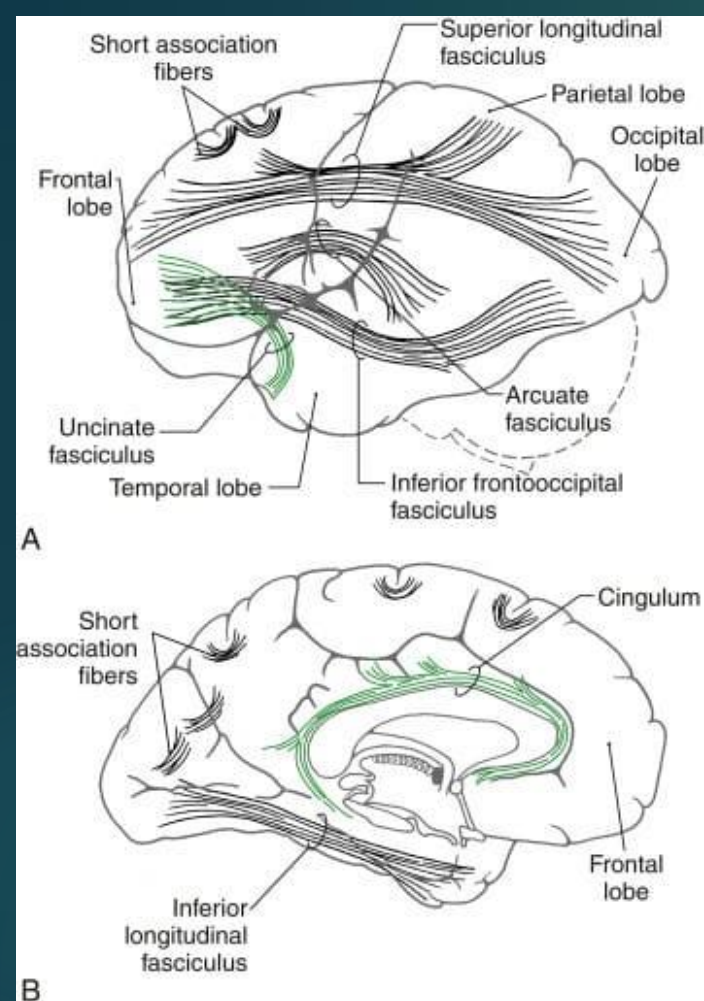


# Behavioural and sensory issues

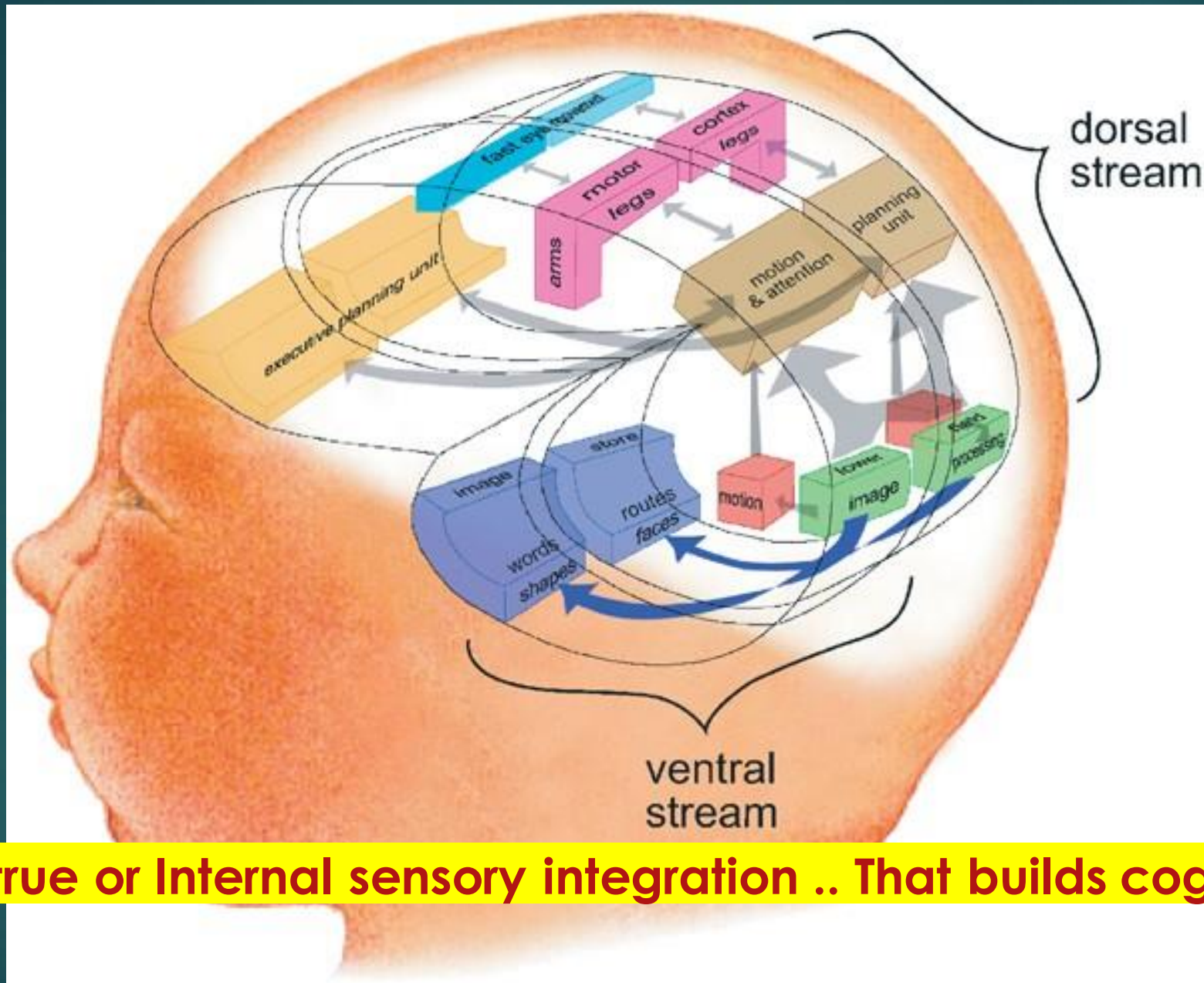
22

- ▶ RRBs
- ▶ Hypo or hyper sensory



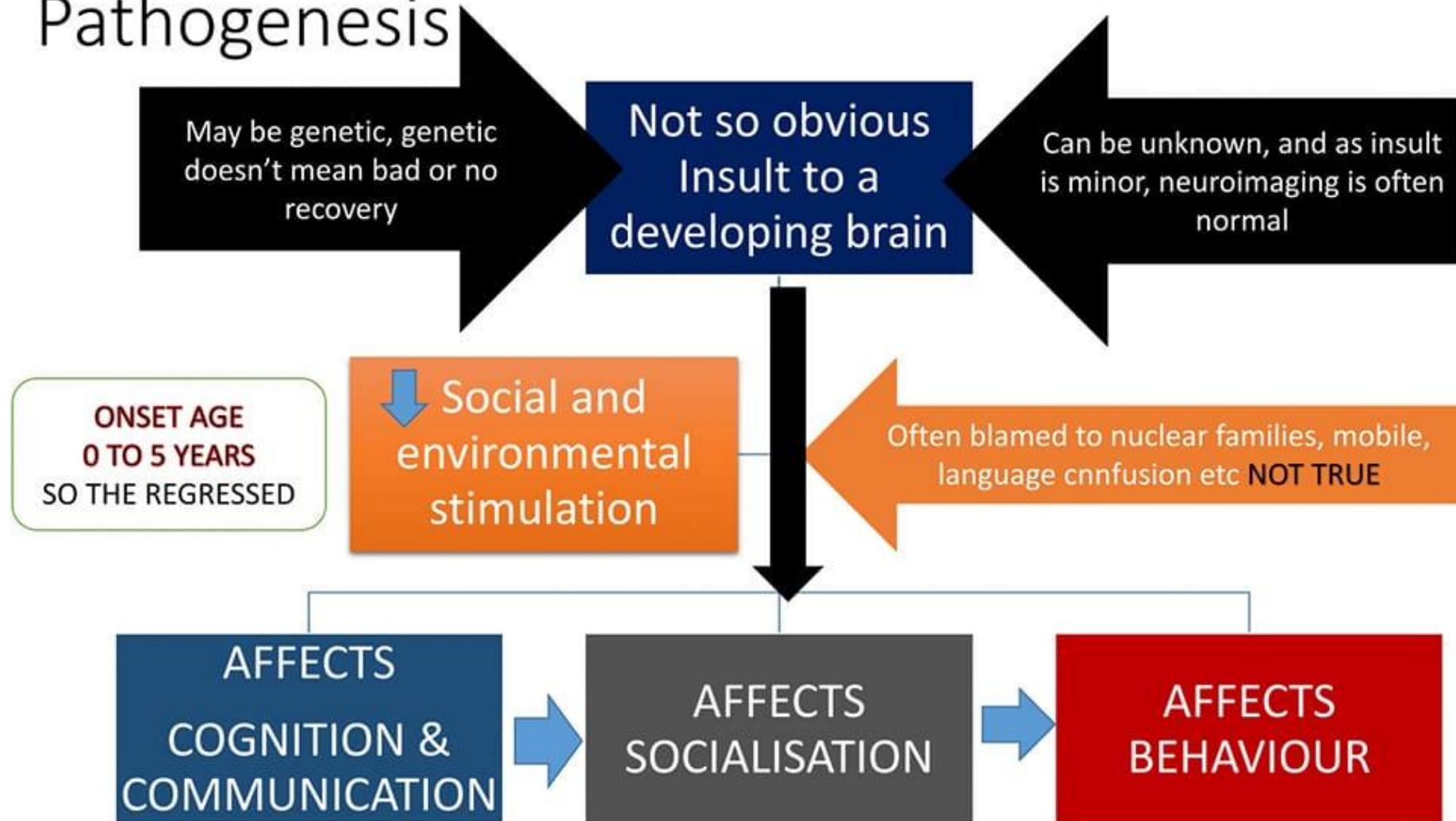


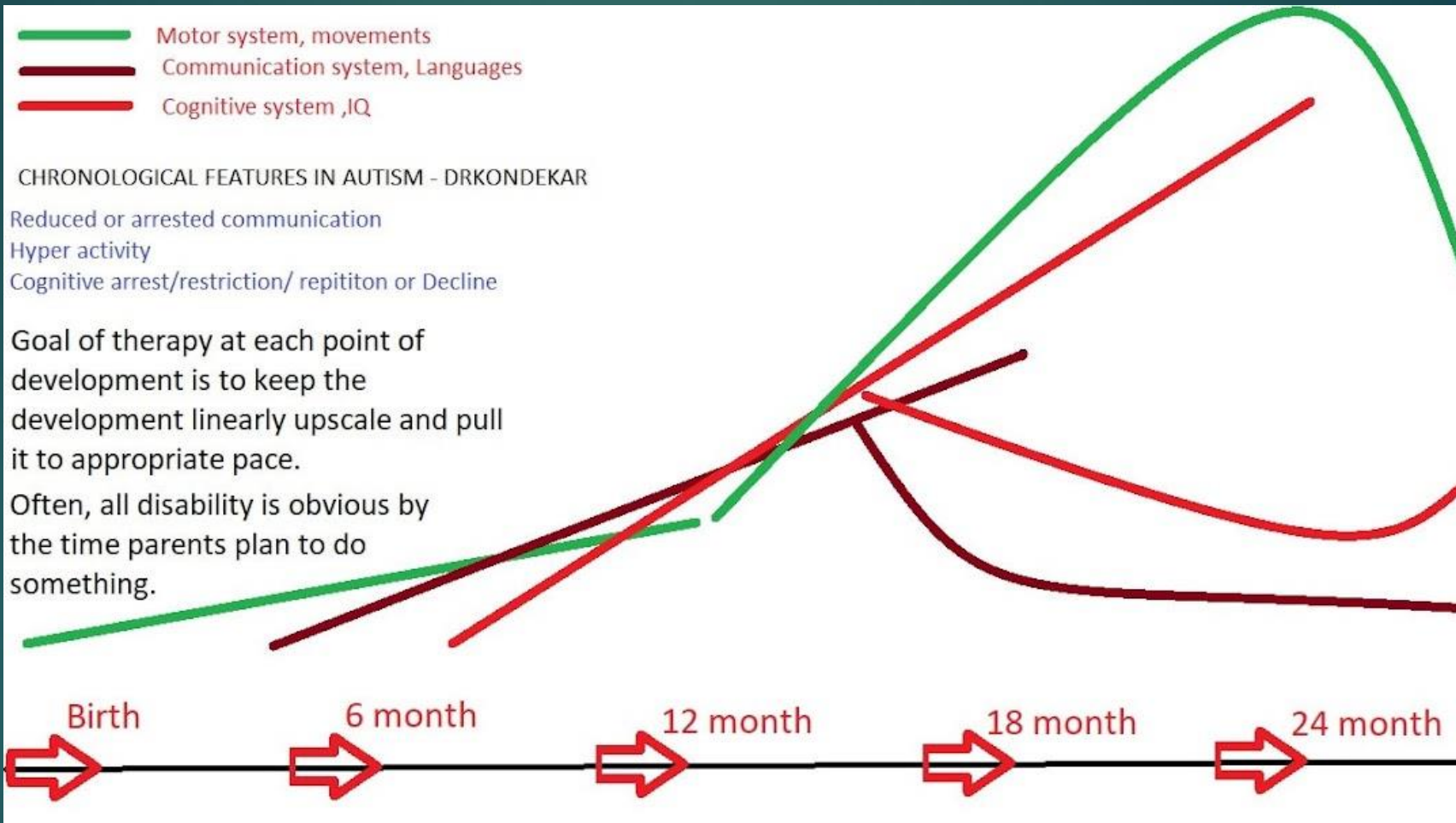
The sensory network.. #MakingSense  
AUTISM CAN BE EQATED TO **SENSORY CP**



**The true or Internal sensory integration .. That builds cognition**

# Pathogenesis





**Behavior  
Programs**



**Education  
and Learning  
Programs**



**Medications**



**Other  
Treatments  
and Therapies**



# No therapy to be delayed pending diagnosis or certificate, **THERE IS NO HURRY TO CERTIFY**

www.autismdoctor.in  
1/18/2023

- ▶ Certificates don't give solution, it just helps us to have a paper to use concessions by PWD Act and Insurance schemes.
- ▶ Needs 3 yearly renewal till age 18 yr.
- ▶ Whatsapp me 9869405747 if u need copy of PWD act and its provisions.
- ▶ Parents group help share feelings, social venting out and finding a peer for socialisation. Learn from them. But remember all cases of autism are not same or at same stage as level of affection and manifestation is likely to be different.
- ▶ INSTEAD OF GLORIFYING KIDS AS SPECIAL, LETS WORK TO TURN THEM INTO SOCIAL.

# So how is DSM 5 therapeutically useful? 29

www.autismdoctor.in  
1/18/2023

- ▶ Develop connections in brain in undeveloped areas, that will reflect in same externally
- ▶ **Synaptogenesis and pruning via medications and early interventions- OT ABA**
- ▶ Sensory modulation and integration
- ▶ OT ABA SpeechTherapy services for **stepwise improvements**
- ▶ **Periodic assessment and goal settings**
- ▶ IQ and tests for assessment of learning disability and certification

# Counselling

30

www.autismdoctor.in  
1/18/2023

- ▶ Is mainly **for parents** to cope up and have hopes
- ▶ Child can understand counselling only when child grows to that level of understanding
- ▶ Every parent ends up counselling others; so do therapists psychologist and doctors.
- ▶ **Its more imp that parents spend more n more time with the child to understand the child and make the child understand them**
- ▶ Being continuously on internet to search for info is less imp than being with child.
- ▶ More the understanding of the child, there will be response to Behavioural Therapies

# Sequential developments: core-basic

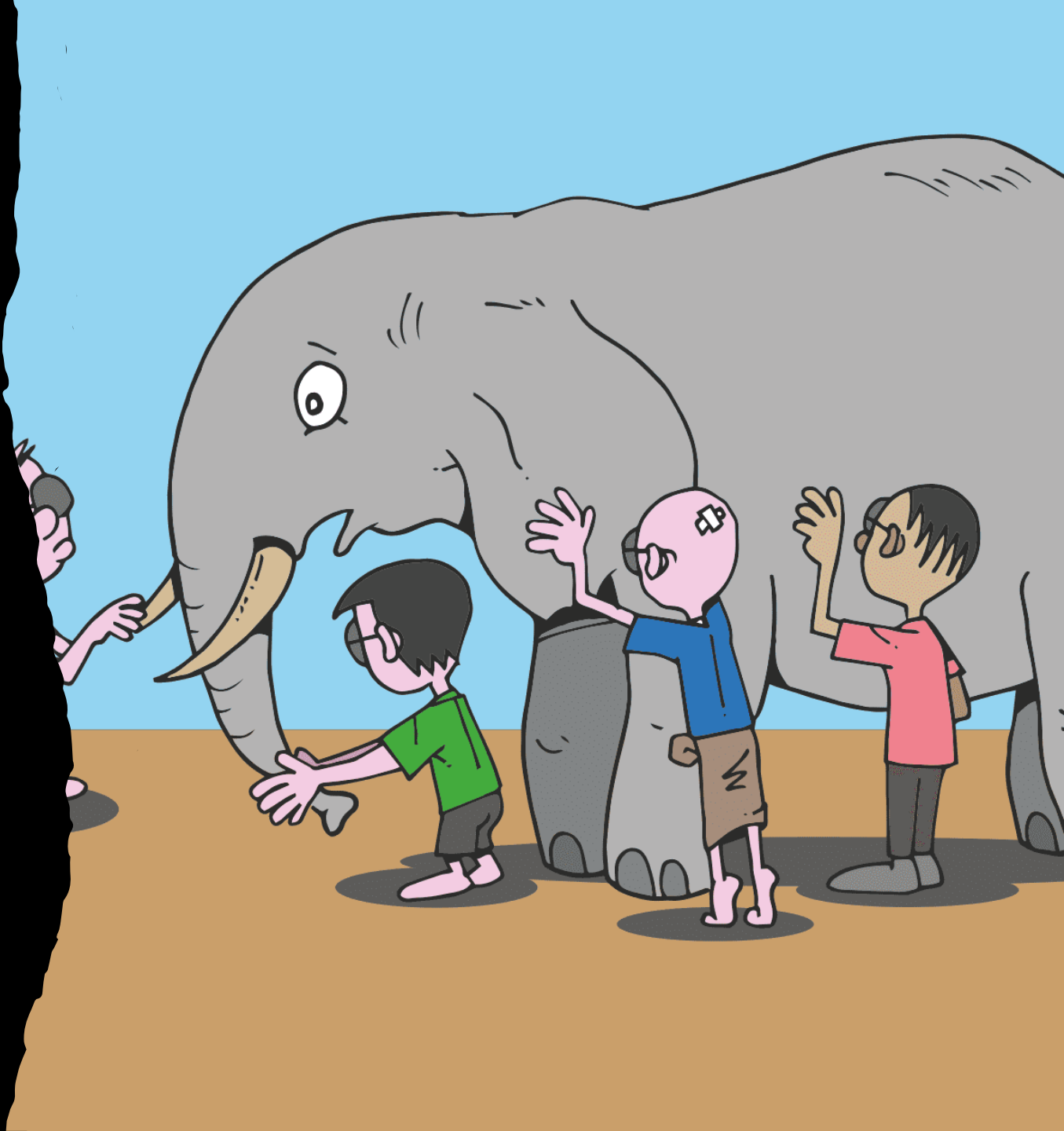
31

www.autismdoctor.in  
1/18/2023

- ▶ Some eye contact [**Register**: communication]
- ▶ Response to commands [**Response**]
- ▶ **Receptive** language- basic needs, later actions
- ▶ **Reciprocation** for basic needs, only 1 to 1
- ▶ Reciprocation for commands or actions
- ▶ Beginning of **Regulation**/ sitting at one place, a must for learning
- ▶ **Responsible Reaction**: Affection, emotions, non verbal communication
- ▶ Beginning of Vocalisation
- ▶ Change in fascination, **repetitive** sounds, sensory issues and stereotypes or stimming
- ▶ **Re-visions, generalisations**

# Sequential developments b- integrative

- ▶ **How to improve processing and action - only by improving senses and frequency of input**
- ▶ **Every sense is used for cognition, that when processed or integrated together with information gives recognition**



# THERAPY CANNOT BE RANDOM

33

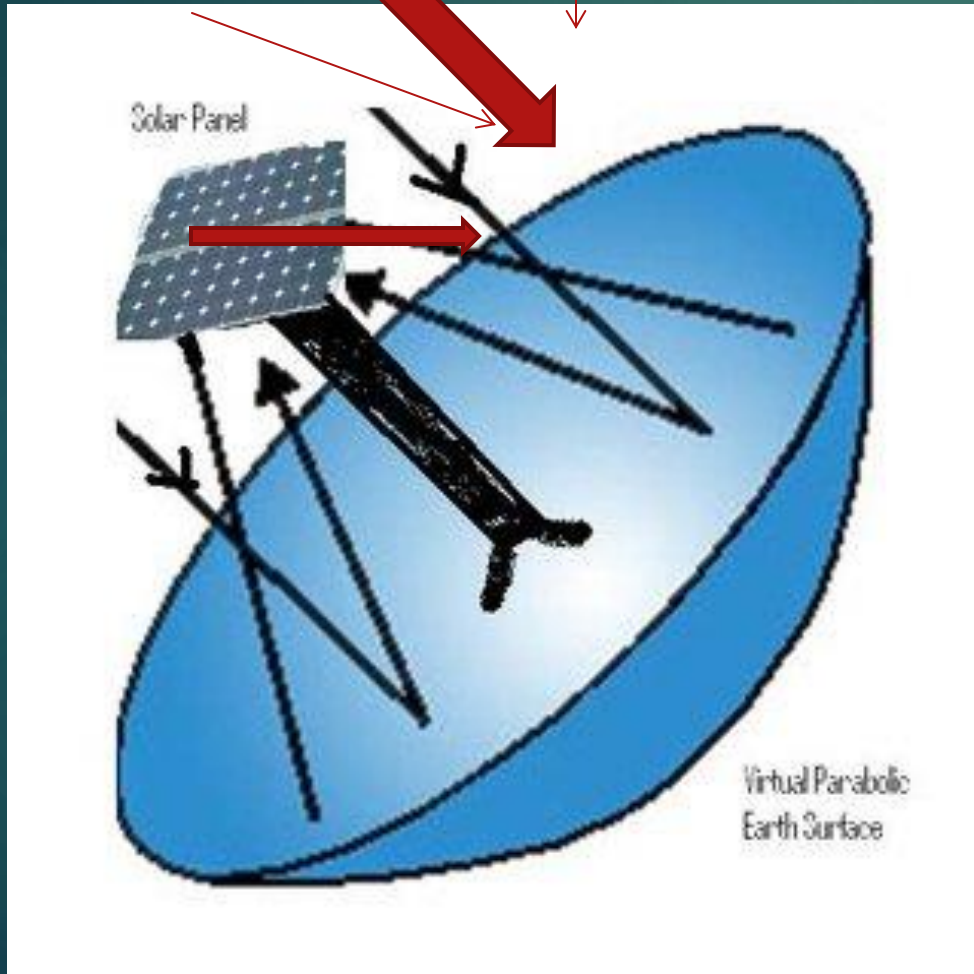
www.autismdoctor.in  
1/18/2023

- ▶ IT HAS TO BE STRUCTURED , TIME DISCIPLINED AND FREQUENT.
- ▶ **PREFERABLY BY EXPERT,** HOME THERAPY IS ENCOURAGED.
- ▶ HOME THERAPY AS ADDITIONAL, BETTER THAN NOTHING, DOESN'T MEAN EXPERT IS NOT NEEDED.
- ▶ FAMILY BASED THERAPY CAN'T BE A REPLACEMENT TO A TRAINED PROFESSIONAL WHO KNOWS RIGHT WRONG AND **NEXT STEPS.**

In some kids, doctors may suggest medicines to make child compliant for therapy. So that it won't go waste.

**Therapy is not just giving toys, plays, ladders swings and puzzles.**

# Sensory Integration



More strong ,  
More frequent,  
More persistent and more  
structured and planned the sensory  
input, faster will be the integration.

**THIS IS THE SCIENCE OF  
CONSCIENCE.**

**It helps make child receptive  
provided it integrates internally**

# ABA: Techniques of learning

35

www.autismdoctor.in  
1/18/2023

- ▶ Positive Reinforcement
- ▶ Negative Reinforcement
- ▶ Prompting and Fading
- ▶ Task Analysis
- ▶ Generalization
- ▶ Behavior Contracts
- ▶ Video Modeling
- ▶ Picture Exchange Communications Teaching
- ▶ Errorless Teaching
- ▶ Peer-Mediated Social Skills Training

ABA TECHNIQUES ARE MORE HELPFUL WHEN EVERY THERAPIST INTEGRATES IT....IN THEIR DAY TO DAY DEALING WITH KIDS

One may give plenty of inputs but if child is not receptive its waste.

36

www.autismdoctor.in  
1/18/2023



**Its our role as Dr to make the child receptive for therapy.**

# Bridge of a neuron is from both sides

37



**Enable the Brain**

**Add Sensory & Therapy Inputs**

By Frits Ahlefeldt

Building bridges between neurons helps us reduce the sensory traffic jam, bridges help bypass the chaos to a great extent.

38

www.autismdoctor.in  
1/18/2023



# Benefits of Early Intervention

39

www.autismdoctor.in  
1/18/2023

1



Increase IQ,  
Communication and  
Social Interaction

2



Decrease problematic  
behaviours from  
becoming a habit

3



Develop meaningful and  
lasting relationships

4



Gain essential social  
skills and thrive in society

# Neuroplasticity has deadline

40

www.autismdoctor.in  
1/18/2023

- ▶ If not tackled in time, it has potential for certifiable disability, dependency, learning disability, special schooling and intellectual disability.
- ▶ Early intervention is key, better late than never.
- ▶ Never give up.
- ▶ Remember parents are never at fault, they just are not aware of problem and its seriousness.

# No child is hopeless

41

- ▶ Every child has potential to improve, at every age and stage beyond current capacity to get closer to main stream.
- ▶ Sounds impossible to those who have parented an ASD child for 10 years... but if not now, never.
- ▶ Science is changing, so did autism, from its definition to management.
- ▶ Always There is something newer you have not tried. Be with experts, don't be your own Dr.

# Practical tips

42

- ▶ Accept the possibility, that your child can do better than what is right now
- ▶ Donot neglect multidisciplinary approach, but leave it for your neuro pediatrician to decide.
- ▶ No change in 3 months, don't sit quiet, u need a change of plan / expert.
- ▶ If parents' and child's quality of life is not comfortable, experts / decision makers need a second thought... Change !!
- ▶ Holistic approach with all specialists as needed.
- ▶ Immediate goal setting is key to give target to experts. Continue with what works visibly in 3 months.

# Give up the negativity

43

www.autismdoctor.in  
1/18/2023



IMPROVE QUALITY OF LIFE OF PARENTS AND KIDS TO FULLEST.  
NOTHING BEYOND PARENTS QUALITY OF LIFE.

# Persistence pays

44



www.autismdoctor.in  
1/18/2023

**But there is always a better way to move the stone.. Use a stick. experts**

# You cant just go on walking.. When you are disabled.

45

www.autismdoctor.in  
1/18/2023



## Therapists will get you on track.@

But how about getting in a train.. If Not plane..

46

www.autismdoctor.in  
1/18/2023



Structured and disciplined.... directed

CHILD DOESN'T FAIL ,  
EXPERTS DO

Parents don't fail, they get carried  
away...

There is always a .....

48



www.aftismdoctor.in  
1/18/2023

To get closer to main stream.....

Early intervention is the key, whatever u may chose to

49

**its not a cafeteria approach, its rigorous intense multidisciplinary intervention**

due to non conclusive or slow results parents tend to use their own strategies, novel therapies and deviate from recommended standard of care.

It's the job of PCP to decide priorities, frequency and sequence of interventions considering social, emotional and financial backgrounds.

# AAP: 9 Interventions

50

## 1. ABA

*Most evidence-based treatment models are based on principles of ABA.*

*ABA has been defined as “the process of systematically applying interventions based upon the principles of learning theory to improve socially significant behaviors to a meaningful degree, and to demonstrate that the interventions employed are responsible for the improvement in behavior.”*

*The use of ABA methods to treat symptoms of ASD suggests that **behaviors exhibited can be altered by programmatically reinforcing skills related to communication and other skill acquisition.***

*ABA interventions vary from **highly structured adult-directed approaches** (eg, discrete trial training or instruction, verbal behavior applications, and others) to **interventions in natural environments** that may be **child led and implemented** in the context of play activities or daily routines or activities and **are altered on the basis of the child’s skill development** (eg, pivotal response training, reciprocal imitation training, and others).*

# Interventions

51

www.autismdoctor.in  
1/18/2023

## 2. **Developmental Relationship-Focused Interventions**

*Developmental theory, which is focused on the relationship between the **caregiver's level of responsiveness** and the child's development of social communication.*

*Through **interaction** with others, children learn to communicate and regulate emotions and establish a foundation for increasingly complex thinking and social interaction.*

*Therefore, developmental models designed to promote social development in children with ASD are focused on the relationship between the child with ASD and his or her caregiver through coaching **to help increase responsiveness to the adult** (ie, the interventionist or parent or caregiver) through imitating, expanding on, or joining into child initiated play activities.*

***This approach may address core symptoms of ASD, such as joint attention, imitation, and affective social engagement.***

*Developmental models for intervention are focused on teaching adults to engage in nondirective interactive strategies to foster interaction and development of communication in the context of play.*

*One such approach is known as **DIRFloortime (The Developmental, Individual Differences, and Relationship-Based model).***

# Interventions

## 3. Naturalistic Developmental Behavioral Intervention

52

*Intervention for young children also may be derived from **developmental theory** which is focused on the **relationship between the caregiver's level of responsiveness and the child's development of social communication**. Through interaction with others, children learn to communicate and regulate emotions and establish a foundation for increasingly complex thinking and social interaction.*

*Therefore, **developmental models** designed to promote social development in children with ASD are focused on the relationship between the child with ASD and his or her caregiver through coaching to help increase responsiveness to the adult (ie, the interventionist or parent or caregiver) through imitating, expanding on, or joining into child initiated play activities.*

*This approach may address core symptoms of ASD, such as joint attention, imitation, and affective social engagement. Developmental models for intervention are focused on teaching adults to engage in nondirective interactive strategies to foster **interaction and development of communication** in the context of play. One such approach is known as DIRFloortime (The Developmental, Individual Differences, and Relationship-Based model).*

## 4. Parent Management Training

*Increasing evidence reveals that **focused interventions** delivered by trained parents or other caregivers can be an important part of a therapeutic program. **Parent management training is divided into 2 categories: parent support and parent-mediated interventions.***

***Parent support interventions**, which are knowledge focused and provide indirect benefit to the child, include care coordination and psychoeducation.*

***Parent mediated interventions**, which are technique-focused and provide direct benefit to the child, may target core symptoms of ASD or other behaviors or skills and may be built on ABA approaches in natural settings.*

## 5. Educational Interventions: Classroom Based Model

Classroom-based models include **Learning Experiences and Alternative Programs for Preschoolers and their Parents (LEAP)** and **TEACCH. Teaching and education of autistic and communication handicapped children.**

*LEAP blends principles of ABA with special and general education teaching techniques for elementary aged pupils in inclusive settings for teaching social interaction.*

*TEACCH class settings are **visually organized** to promote engagement and learning.*

*The TEACCH approach to skill acquisition includes assessment-based curriculum development and an emphasis on structure, including predictable organization of activities and use of visual schedules, organization of the physical environment to optimize learning and avoid frustration (eg, by minimizing distractions and/or sensory dysregulation), and adaptation and organization of materials and tasks to promote independence from adult directions or prompts.*

*Instruction is organized in a predictable fashion and uses visual schedules with promotion of independence in activities planned into the instruction. This approach is associated with a small, but measurable, **benefit in perceptual, motor, verbal, and cognitive skills in students with ASD, with less measured effect** on adaptive and motor function and challenging behaviors.*

# Interventions

## 6. Social Skills Instruction

55

www.autismdoctor.in  
1/18/2023

- ▶ *Examples of social skills deficits include the following:*
  - ▶ • *challenges with entering, sustaining, and exiting interactions;*
  - ▶ • *difficulty attending to, understanding, and using nonverbal and verbal social cues, such as eye contact, facial expressions, and gestures;*
  - ▶ • *difficulty in understanding “unwritten” social rules of the environment;*
  - ▶ • *not understanding the perspective of others;*
  - ▶ • *struggling with negotiation, compromise, and conflict resolution;*
  - ▶ • *problems with interactive play or*
- ▶ *participation in leisure activities.*
- ▶ *Interventions may be divided into adult-mediated (skill building with the individual child), peer-mediated (skill building with the child and typically developing classmates), and mixed approaches.*
- ▶ *Child-directed social skills interventions are often delivered individually or in small groups with other children with similar needs.*
- ▶ *Therapy may be provided in behavioural health settings to complement the social skills interventions at school.*

# Other Therapeutic Interventions

56

## 7. Speech and Language Intervention

*Delayed language is an early concern for many children who are later diagnosed with ASD.*

*When children do not spontaneously speak, **augmentative and alternative communication (AAC)** may be introduced. Examples of AAC strategies include sign language, the Picture Exchange Communication System, and speech-generating devices.*

*The use of AAC may help promote social interaction and understanding of the purpose of communication and does not delay onset of speech. Indeed, it may enhance emergence of spoken words **by pairing nonverbal and verbal communication.***

***The Picture Exchange Communication System** is used to build communication through picture identification and exchange as communication. With training, pictures can be sequenced to build on communication. 367 Picture strips that sequentially explain medical procedures, for example, take advantage of this approach.*

*Acoustic feedback to the child, and touch-screen tablets are relatively inexpensive and portable.*

# Other Therapeutic Interventions

57

## 8. Motor Therapies

*Children with ASD may have low muscle tone or a developmental coordination disorder. **DCD***

*Although the ages for sitting and walking do not differ between children with ASD and children with typical development, both fine and gross motor skills may be delayed in preschool-aged children with ASD.*

*Attention to position in space in children with a coexisting diagnosis of ADHD may further complicate delays in coordination.*

***Occupational therapy** services may be indicated to promote **fine motor and adaptive skills**, including selfcare, toy use, and handwriting. Almost two-thirds of preschool-aged children with ASD are reported to receive occupational therapy services.*

# Other Therapeutic Interventions

## 9.Sensory Therapies

*This therapy requires an occupational therapist, to work with a child by using play and sensory activities to reinforce adaptive responses.*

*The therapist explains the child's behaviors and responses to caregivers in sensory terms and provides them with strategies to help the caregivers accommodate the child's sensory needs to decrease functional impairment and tolerate environmental triggers.*

# Many parents prefer to decide what they want



- ▶ At times even therapists try to sell what they are trained at rather than what the child needs.
- ▶ Each expert feels they are the best
- ▶ Each parent feels they are the best to decide
- ▶ When its not targeted, time is wasted

# GOAL SETTING

**S**PECIFIC  
**M**EASURABLE  
**A**TTAINABLE  
**R**ELEVANT  
**T**IMELY



# Change the goals to bring about the change

# Why do we need a structured program<sup>62</sup>

- ▶ Random therapy approaches lead to random results
- ▶ Child should be first receptive to register the input.
- ▶ **Input shall be goal directed to make the child responsive.**
- ▶ **Its important to understand and prioritise the specific domain of development**
- ▶ Unless the child responds appropriately, desired outcome wont be seen.
- ▶ Its important to not habituate the child to be dependent to make the child independent.
- ▶ Parental involvement is key for home based revisions.
- ▶ Most autism kids are physically hypotonic and yet hyper or excited at times. Despite that they donot have physical disability.

# Development is a sequential process

63

www.autismdoctor.in  
1/18/2023

- ▶ **Jumping to abcd and 1 2 34** academics before the kid learns basic communication is waste of time
- ▶ **Introducing early music** when the language needs to be learnt, will keep the child away from language based learning. As music only adds to rhythm and bypass.
- ▶ Keeping child **busy in seeing doing activities** before the child has registered the activity is mechanical and will not cause any learning.
- ▶ When **goal is to listen and talk**, forcing seeing doing dominant activities will take the time that would have been used for listening and talking
- ▶ If the child is not receptive, child cannot register the environment, both living and non living
- ▶ **Only when child notices objects, child develops awareness of nonliving world, then only child is ready for learning living world.**
- ▶ Communication goes in sequence from eye contact, response to commands, attention and pointing to nonverbal communication and later verbal communication. If any of these is not achieved, next steps are likely to be delayed.

# Prime and early goals

64

**As communication , cognition and conversation is primarily affected, this shall be kept as high priority goal.**

Instead if the parent or expert is kept busy with working on toe walking, motor strength, and minor sensory issues; the time of early intervention for priority goal is not utilized as prime.

For example: swimming, skating and other solo physical activities will only kill the time for prioritized activities .

**Its important to understand that, below age 5 years weak development needs to be strengthened reducing time on stronger part. After age 15 yr, weak field of development needs to be neglected.**

Without controlling violent and hyper episodes, therapies will be unfruitful.

Teaching by asking questions is like taking exam before the chapter is understood. Teach by narrations and not by questions.

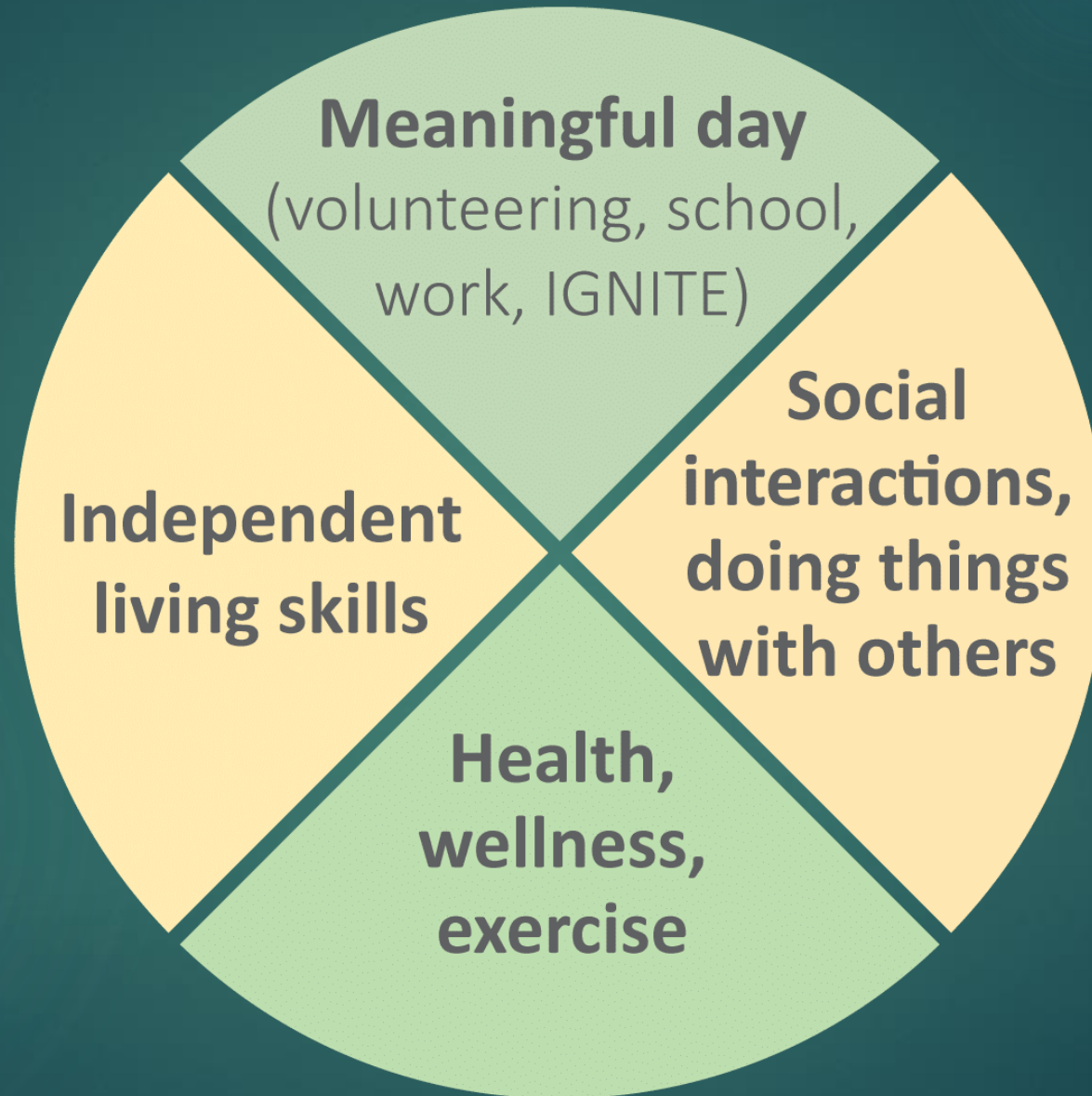
# Sit with parent, prioritise the goals

65

www.autismdoctor.in  
1/18/2023

- ▶ Sit
- ▶ Look
- ▶ Listen
- ▶ Understand
- ▶ Follow
- ▶ Obey
- ▶ Perform
- ▶ Feel
- ▶ Imitate
- ▶ Copy
- ▶ Play
- ▶ React
- ▶ Interact
- ▶ Converse
- ▶ Read
- ▶ write

Goals: list , prioritise and add steps  
Work towards it consistently and  
repeatedly for sustained results



# Factors that affect goal setting in autism

- ▶ Age
- ▶ Dependency or level of severity
- ▶ Receptiveness of learning , hyperness, behavioral issues
- ▶ Stage of development and maturity of understanding
- ▶ School readiness and school acceptability
- ▶ Level of communication, conversation, cognition
- ▶ Comorbid conditions like epilepsy, LD, ADHD
- ▶ Family environment, financial stability and capacity
- ▶ Availability of a specific expert

# Age

68

- ▶ Age of child decides the potential for mainstream development and time for early intervention in hand
- ▶ **For age less than 15 years, goals are targeted towards development of weaker domains**
- ▶ **For kids > 15 years, weaker is given up and only stronger domain or interests are looked into**
- ▶ Early age has a high potential for development of verbal language and communication which diminishes after age 10 years
- ▶ **Device based and gesture based nonverbal communication is encouraged after age 7 years, when verbal development is unlikely.**
- ▶ Younger age kids will have issues with awareness and cognition. Kids after age 3 years have issues with behaviour and hyperness. Kids with age beyond 7 years are prone for antisocial traits.
- ▶ **Elder kids will have issues with socialization, friendship, relationship and group activities or team spirit**

# Level of severity

69

- ▶ Severity in autism is classified as per level of dependency
- ▶ **Dependency is decided by maturation of ADL**
- ▶ ADL functionality is decided by level of understanding and awareness of surrounding
- ▶ So before working on ADL, goal shall be awareness of surrounding and awareness of people
- ▶ Awareness is not possible without attention by eyes and ears
- ▶ **So visual and auditory awareness remains key for initiating development. This is not so in physical disabilities.**

# Receptiveness of learning

70

www.autismdoctor.in  
1/18/2023

- ▶ Every thing one learns is by being receptive and then copying and conditioning to a stimulus.
- ▶ To learn, one needs to be ready to learn.
- ▶ **Learning is best done in learning posture**
- ▶ **Posture to sit look listen feel and understand.**
- ▶ So the immediate goal shall be stability of sustained sitting , looking and listening
- ▶ So improving sitting tolerance, eye to eye connection and responsive listening needs to be prime goal ahead of other goals.
- ▶ **For the same reason, tackling hyperness, behavioural issues, fidgetiness, in attention and violence on war footing is of prime importance.**

# Stage of development and maturity of understanding

71

www.autismdoctor.in  
1/18/2023

- ▶ Development of sense and learning is a purely sequential process, next level builds on previous level
- ▶ Only when child is receptive, child can notice, be aware and develop understanding.
- ▶ **Only when child understands, child can respond, react, reciprocate.**
- ▶ For example, when child has some attention, child can learn to respond like say smile, point, imitate, perform and understand nonverbal cues. [Prelinguistic skills]
- ▶ Only then child ready to perform fine motor acts, cognitive acts and then child is ready for academic learning.
- ▶ **Introducing academics before communication and basic cognition is waste of time.**

# School readiness and school acceptability

72

www.autismdoctor.in  
1/18/2023

- ▶ Often kids may have a different behavior in school and playgroups
- ▶ **Behavior is often altered by behavior of others [kids, staff] and interpretation of same by the child.**
- ▶ **Anything not acceptable by school staff is likely to be a significant problem.**
- ▶ There is no point convincing school staff saying this is normal.
- ▶ Often school has issues when child's behavior troubles or disturbs others or child disrupts peace and discipline or sleeps or under performs
- ▶ **For school retention, its of prime importance to change goals as per school needs.**
- ▶ A child acceptable at school below first standard doesn't mean he is ready for school, unless he can sit , look, listen , feel, understand and respond.
- ▶ A child is accepted better when child take part in interactive play,.

# Level of communication and cognition

73

www.autismdoctors.in  
1/18/2023

- ▶ As the child develops in higher level of learning, child needs to understand human behavior and communication.
- ▶ **Feelings, behavior, conversation and cognition are seen only with living beings. Then socialization makes it more human.**
- ▶ Above human behaviors are best learnt interactive in group and not with toys, objects, puzzles.
- ▶ **So cognitive and team/group/social activities are important only when child is ready to understand and express.**
- ▶ Even behavior is modifiable by counselling as child is ready to understand, respond and follow.
- ▶ **Better language development like say understanding stories , makes understanding concepts / science easier.** Better the understanding of concepts, maths is understood better.

# COMORBID CONDITIONS

74

- ▶ Some comorbidities of autism like **ADHD, constipation and epilepsy** need to be treated as prime goal.
- ▶ Partial or undertreated comorbidities will yield poor response to therapies and learning

# Family environment and financial capability

75

www.autismdoctor.in  
1/18/2023

- ▶ Family structure, harmony and interactions are key for social development
- ▶ Family based therapy and interventions do help sustain learning.
- ▶ **Its also important to maintain peace of family and not just keep every family member busy full time working with objects and toys.**
- ▶ Family members giving up jobs is strongly discouraged, as more number of helpers for social interaction can be hired through same income. **Giving up job adds to stress, depression and financial burdeon.**
- ▶ When financially not feasible, goals need to be adjusted as per ability and capacity of each member.
- ▶ **Home shouldnot look like a therapy center.** Home Therapy is best done with home based activities and not converting home into a therapy center.

# Availability of expert

76

- ▶ There has been lots of run around by parents for ABA experts as they are marketed as the only proven way of some improvement with RCT, if done by certified ABA.
- ▶ **Parents should not run pillar to post running for 'the best'**, but trying to settle with the closest set of multidisciplinary experts.
- ▶ Often for preliminary level principles of therapy do remain same. **All experts need to modify their strategies as per need of child** in the given week of the given month looking for progress every week.
- ▶ **Timely Early intervention is key than running for the best.**
- ▶ Therapeutic touch and skills of therapist do matter. Whenever no improvement is seen in 100 days, a second opinion or second thought should not be discouraged.

Type of improvement expected	Proposed therapy that works best, though all add on
Daily living: understanding of daily living, feeding, communication and urine / stools	Occupational therapy
improving further understanding, receptive communication, expressive communication, body language, non verbal communications and vocalisation to speech development	Speech therapy
Executive functions day to day actions apart from survival acts, basic commands, gross and fine motor movements, imitations, copying skills, role plays, games	Occupational therapy, Play therapy
Holding pen, pre writing skills, writing skills, developing object memory and understanding	Occupational therapy, special educators
word memory, structure of sentence, symantics, syntax, pragmatics, understanding a story, expressing above all	Speech therapist
logistic reasoning, hierarchial thinking, sequencing of thoughts and actions	Special educators, Occupational therapy
Behavioral modulation in cognitively responsive child	Behaviour Therapy, counsellors
Dr Kondekar Santosh	<a href="http://www.NeuroPediatrician.com">www.NeuroPediatrician.com</a>

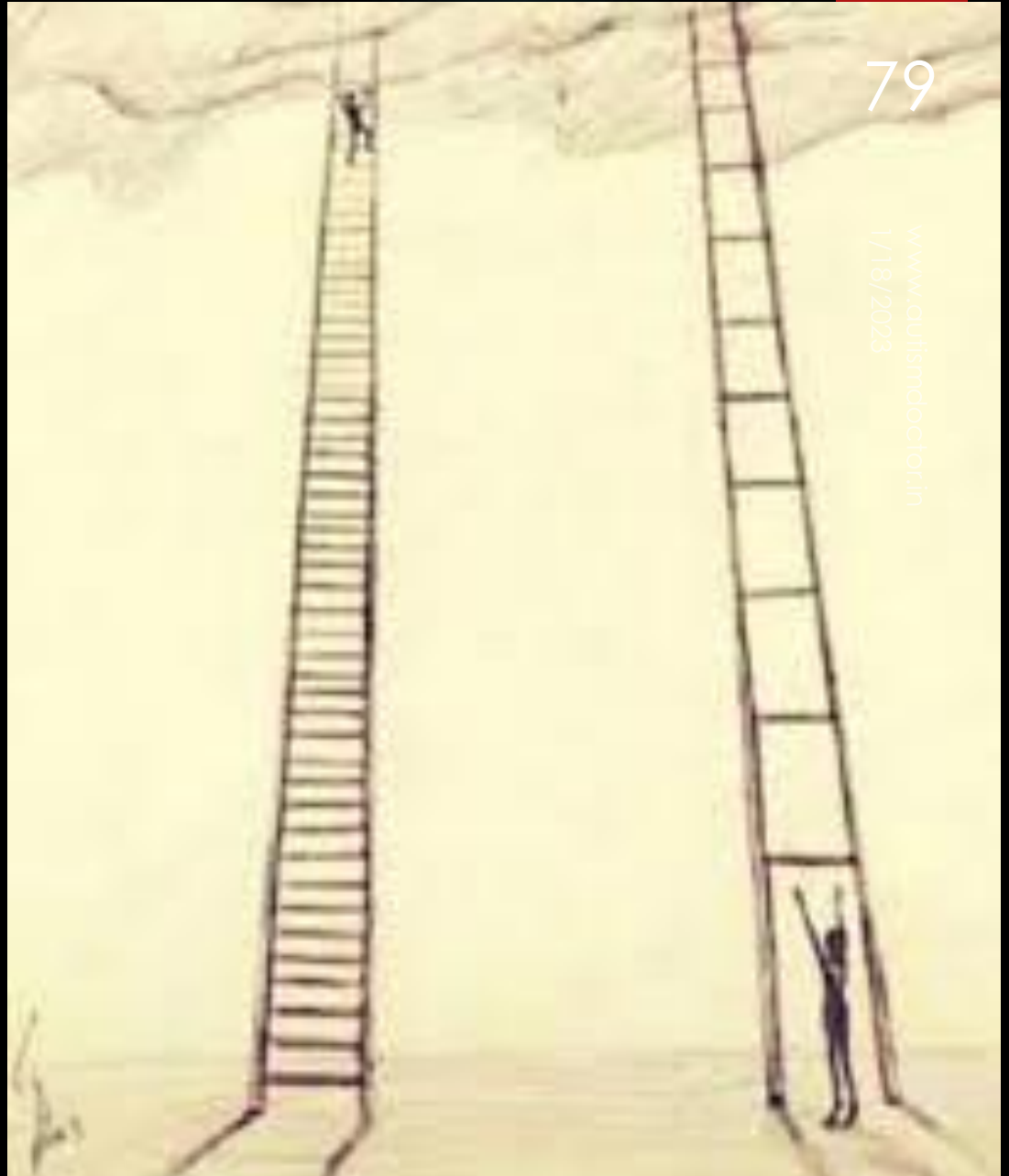
# COMMUNICATION TRAIN AND MAJOR STATIONS: Timely Goals

78

Normal kids	2month	4months	6 months	8 months	10 months	12 months	3 enemies
First year of life	Social smile and eye contact	Response to sounds	Declarative gaze	Declarative pointing	Imperative pointing	Points 5 body parts and distant pointing	Gut issues
Second year of life	Emotions and feelings	Imitations And sense of gravity	Body language and nonverbal communication	Few words with meaning	Small two word sentences	Joining sentences	stubbornness
Third year of life	Long sentences	Use of adjectives	V long sentences and phrases	Tells stories	Asks questions	Read / write	hyperness

Dividing the goal into multiple small steps makes it easy to achieve.

**DTT** DISCRETE  
TRIAL  
TRAINING



# Thank you

80

www.autismdoctor.in  
1/18/2023

**Change the Goals to bring about the change.  
Quality of life of child and family in the long run is equally important.**

**Goal directed Cognitive Approach GDCA**

**Dr KONDEKAR 9869405747**