Speech delay and basics of autism care

MADE SIMPLE FOR PARENTS QUESTIONS AT THE END OF SESSION INFORMATION IS BASED ON REAL LIFE EXPERIENCES BY DOCTOR IN 1000s OF AUTISM KIDS

Dr Kondekar SV **9869405747** MD DNB, DDN, Fellowship Neuro/Epi Associate Professor Pediatrics Topiwala National Medical College Mumbai AUTISM CONCEPT CHANGED AFTER 2013, SO OLD TIMERS STILL FEELL IT ONLY AS A NON MODFIABLE DISABILITY. ACCEPT AUTISM DON'T ACCEPT DISABILITY

<u>www.neuropediatrician.com</u> to see concepts, videos, goal directed care and cure, Fortnightly symptom diary and free autism helpline

for a booklet on home based therapies whatsapp 91-9869495747

This is part 2 of the previous talk In autism by dr kondekar

- First talk is available at <u>www.neuropediatrician.com</u> as a video link
- Current talk boosts further understandings and makes black and white suggestions to help parents get queries solved.
- List your questions, ask at the end of the talk.

Free whatsapp answers to queries 9869405747

What are we going to learn?

- Speech Language and Communication
- Delay, Deficit, Disorder All are one time insults
- Stages of Speech
- Why the child could not learn speech like others
- Speech regression
- Autism as a social communication deficit Plus
- Why and what of autism basics : DSM V
- Why there always is some hope...
- Therapies , curators, Pundits and Parent support groups
- NEED FOR SPEED
- Medications? Myths about them

Accept autism, don't accept a speech deficit

• Don't accept a speech delay, work on it. It's not just "mic receiver recorder and speaker each time"; there is a main switch too.

Work hard turning a child from from screen learner to auditory learner, Ears help you learn how to speak Eyes teach you how to do.

To make life simpler for parents, I classify speech delays in toddlers into four main types

- 1.Speech delays without any of the following
- 2. Speech delay with social communication deficit with or without behavioral and activity issues
- 3. Speech delay with obvious neurological damage or handicap or milestone delay
- 4. Speech delay with hearing deficit with proven BERA test abnormal

Though speech therapy may be useful in all four types:

1. Needs detailed assessment for hidden issues by ped neuro

2. Needs assessment for autism by ped neuro with specific medicine and sensory integration therapy as early as possible

3. Needs detailed neurological evaluation by ped neuro. Imaging studies and more complex multidisciplinary management

4. Needs hearing aids of different types. To save time and speed up development.

Dr Kondekar's 21 Stages of speech: each 1-3 mths

- 1. Getting ready to listen arousal
- 2. Understanding speech initiation
- 3. Following speech regulation
- 4. Obeying commands- Converting to nonverbal communication
- 5. Non verbal communication expertise
- 6. Vocalisation
- 7. Meaningless sounds
- 8. Meaningful sounds
- 9 Vowels phonemes
- 10. Meaningless words then meaningful word

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Receptive speech

Expressive speech

Speech : Form, Content and Use

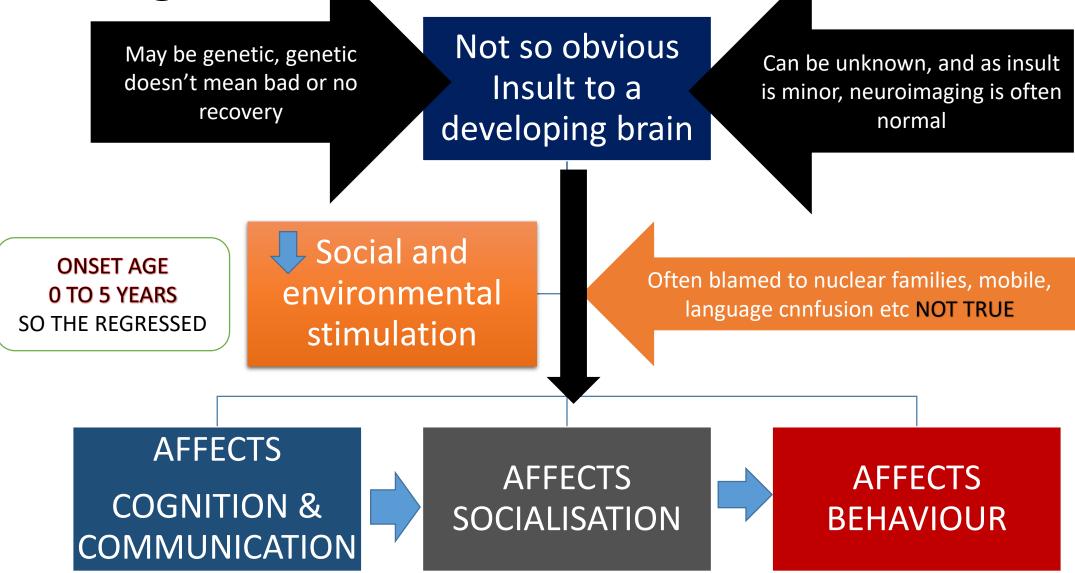
- 11. Echolalia repetitions, copying, meaningless copy, meaningful copy
- 12. Prosody rhythmic humming trying to understand sounds
- 13. Jargon
- 14. Meaningless joining words then meaningful joining words
- 15. Learning verbs
- 16. Understanding and copying actions in words
- 17. Joining two words to make a sentence.
- 18. Many sentences
- 19. Poems and rhymes
- 20. Stories and speech fluency
- 21. Imaginative stories*

Verbal expressive speech

Language developments

- Phonetics / phonology : all sounds, system sounds
- Morphology : forms and words
- Syntax: clauses and sentences
- Semantics: Meanings of various kinds
- Pragmatics: use of language in tone, rhythm

Pathogenesis



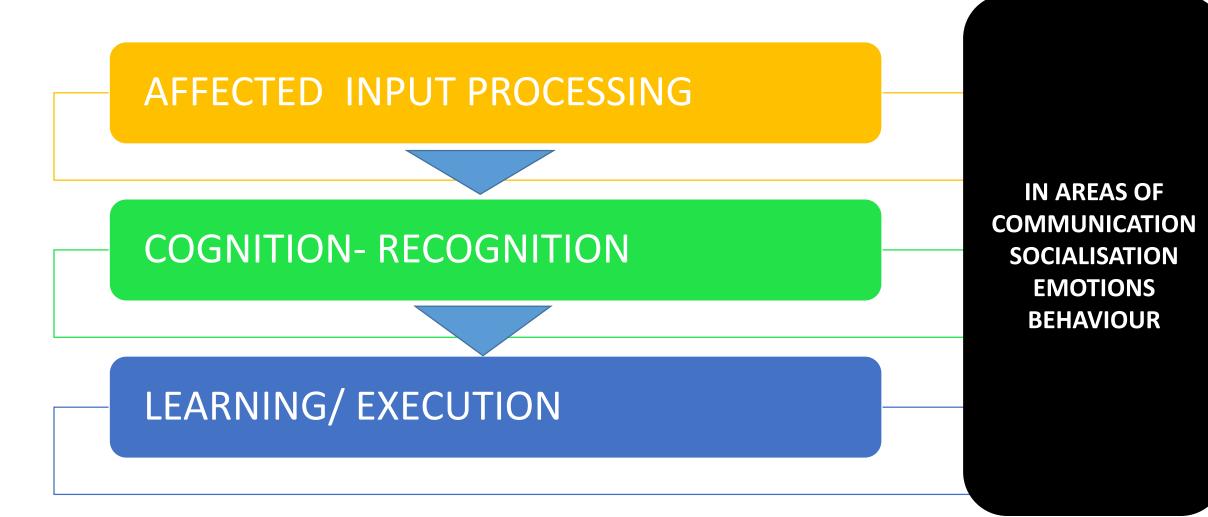
So where in the brain?

IT HAS TO BE THAT AREA OF BRAIN

THAT DOESNOT INVOLVE MOVEMENTS, WALKING AND MAJOR MILESTONES. [MOTOR CORTEX, AS IN CEREBRAL PALSY]

BUT LIKELY INVOLVING SENSORY NETWORK.. FROM INPUT PROCESSING TO COGNITION TO LEARNED/ EXECUTIVE FUNCTION ADVANCED CONNECTIONS TO UNDEVELOPED BRAIN IN SEARCH OF REPAIRING CONNECTIONS MAKES AUTISM BRAIN LOOK LARGER

DEFICITS / DISORDER IN ANY OR ALL



Diagnostic Criteria for 299.00 Autism Spectrum A1 A2 A3 PLUS TWO OF B WILL MAKE DIAGNOSIS

- A. Persistent deficits in social communication and socialinteraction across multiple contexts, as manifested by the following, currentlyor 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 understand relationships.

- B. Restricted, repetitive patterns of behavior, interests, activities, ANY 2
 - 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
 - Highly restricted, fixated interests that are abnormal inintensity or focus
 - 4. Hyper- or hyporeactivity to sensory input or unusual sensory

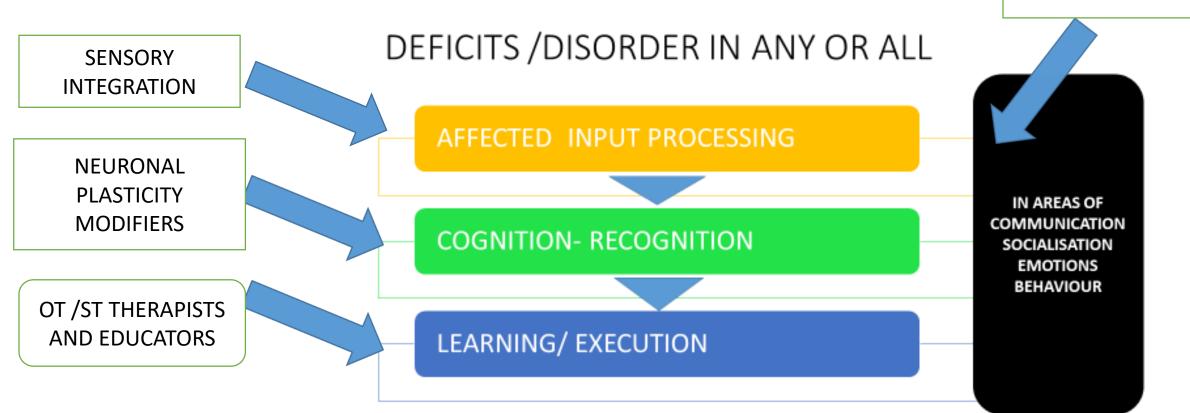
Specify current severity: BASED ON DEPENDENT / PARTLY DEPENDENT / INDEPENDENT

- 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

AND THAT IS WHAT IS DSM 5 DEFINITION

And the recovery can be planned in same way.



BEHAVIOURAL

THERAPIES

Many specialists feel that its only their job alone

Holistic multidisciplinary approach is needed and no specialist can functionally optimally modify these kids excluding others. Combined therapies responf faster, but the role and weightage of each one needs to be discussed with developmental paediatrician in monthly assessments. 9869405747

Technically autism is a sensory issue... Inability to sense the senses And make sense of it And use it sensibly without sensory behaviours

Assessment tools are only for documentation and monitoring

IABLE I SOME DIAGNOSTIC TOOLS FOR AUTISM				
Name of the tool	Time taken (approx)	Age-group	Cost	Languages
INCLEN tool (INDT-ASD)	45-60 minutes	2-9 years (as per the validation study)	Free	Hindi, English, multiple regional languages
ISAA	20-30 minutes	3-9 years	Free	
ADI	120 minutes	2 years and above	\$ 261 [*]	English
ADOS	40-60 minutes	12 months and above	2095^{*}	Hindi, Bengali, English

TABLE I SOME DIACNOSTIC TOOLS FOR AUTISM

*Last accessed in January 2017.

Use Dr Kondekars autism monitoring chart for both assessment and fornightly monitoring to adjust or titrate therapies and medicines. Its for free and is available at neuropediatrician.com

External versus internal sensory integration

To tackle sensory issues your occupational therapists will give multisensory inputs... External Sensory Integration

Same way, the sensory centers in brain need to communicate with each other to generate integrated cognition of the inputs. .. Internal Sensory Integration

To develop new neuronal connections... both chemical and physical / synaptic, Occupational Therapies and neuronal nutrition is of equal help.

Auditory intervention therapies

- Speech therapist role is more important to develop speech when cognition develops
- To some extent every expert including parent uses some degree of auditory commands.
- But its not enough.

Make every child an auditory learner first

- A non verbal child will attempt to speak early only when the child does maximum learning by ears and not by eyes.
- Passive auditory therapy.
- I recommend daily six hours of radio on wall, six days a week for six months, for auditory multi frequency modulation.

How does radio work?

- The music trains the auditory pathways by focusing on the frequency envelope of human speech.
- As child learns to process these speech-related frequencies, they improve the functioning of two cranial nerves that are important for promoting overall social behavior.
- Cranial Nerve VII (Facial Nerve) helps clients focus on human voice and tune out irrelevant frequencies.
- Cranial Nerve X (Vagus Nerve) enables self-soothing and autonomic regulation.

Passive AIT: Radio rules

- Keep in mind its not forced, its passive
- No head phones: child should hear other sounds too
- Not to loud or soft, optimal speech frequency
- Adjust to sound sensitivity of child
- Daily morning 6 hours, from 30 min before sleep till lunch
- Six days a week for six months
- Single radio channel preferably vocal like All India radio /Vividh Bharti
- Any channel is ok, at least one family member should be able to understand language in family
- Titration for Sensory overload

If a child doesn't sit for therapy

It's the job of neurodevelopmental paediatrician to help make a child

- 1. Sit for therapy
- 2. Establish eye contact
- 3. Listen to commands
- 4. No attention means no cognition,
- 5. no cognition means poor therapy results

Settling hyperactivity.. Its not ADHD here

- So actually no ADHD meds, but meds are recommended for autism
- Hyperactivity, hitting, meltdowns etc are actually like volcanoes disrupting the learning process.
- It needs to be tackled on war footing instead of wasting time keeping hands crossed doing .
- <u>Hyperactivity actually is a chaos of senses in brain due to</u> <u>increased curiosity that goes unfruitful due to cognitive</u> <u>block, and this child behaves socially unacceptable.</u>

Behavioural issues

There will often be any 2 of the following behavioural issues in most of the autism cases and it's management may change

from OT-Si Medicines-Behavioural tricks-Conditioning-Diverting-Deviating:

- 1. ***Repetitive** movements /objects/sounds
- 2. *Restricted:* Objects/interests/areas
- 3. *fixed:* concepts, acts, behaviour (stubbornness)
- 4. *Harmful:* hitting, biting, pushing, pressing, at times as a part of miscommunication/frustration/sensory issues
- 5. *Sensory issues:* hypo or hyper response to any known or unknown sense that makes the child to seek or avoid specific sense environment act or object

#makingsense

As circulated by many. Diet is not the root cause of autism.

Dietary issues. Indigestion and constipation are a part of sensory issues of gut being misinterpreted by brain.

This does result in restlessness and hampers learning and milestones

Its important to keep gut clear when hyperactivity is noted.

4 d minus diet works.. No special plan/costs

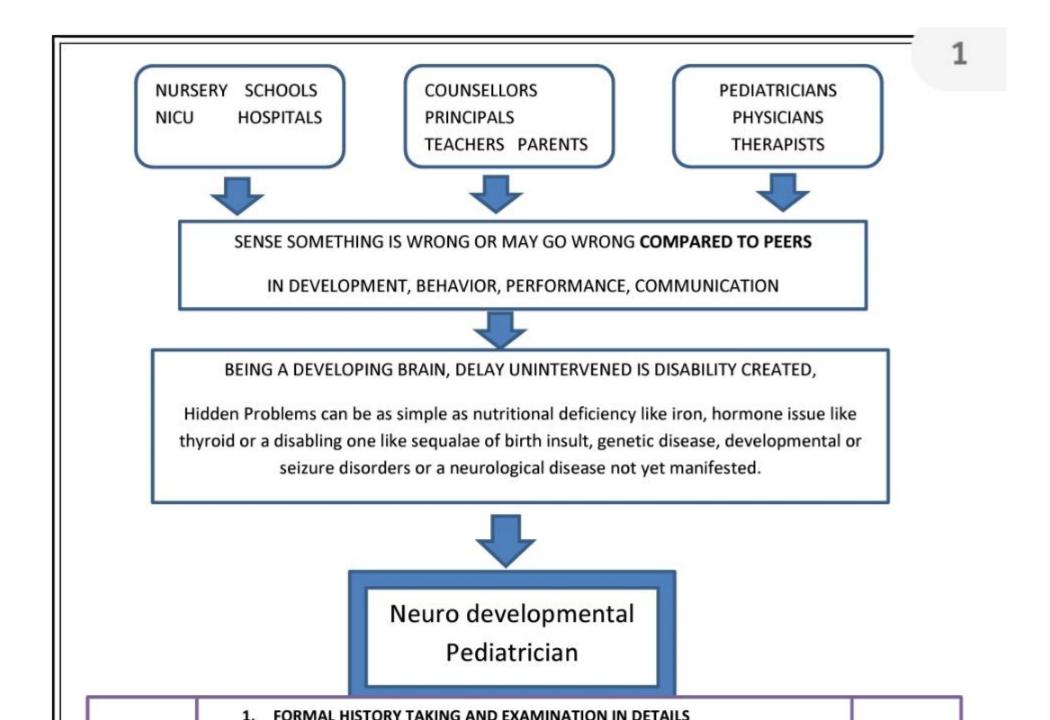
3 months to show change in constipation related hyperactivity and appetite

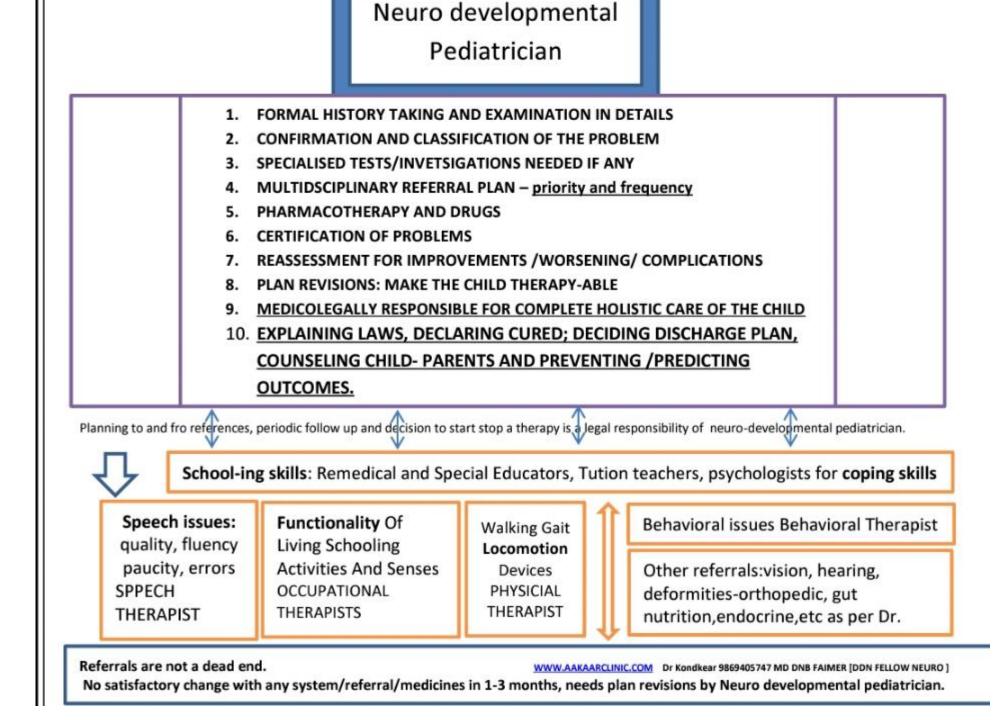
Skip from diet for 3 months

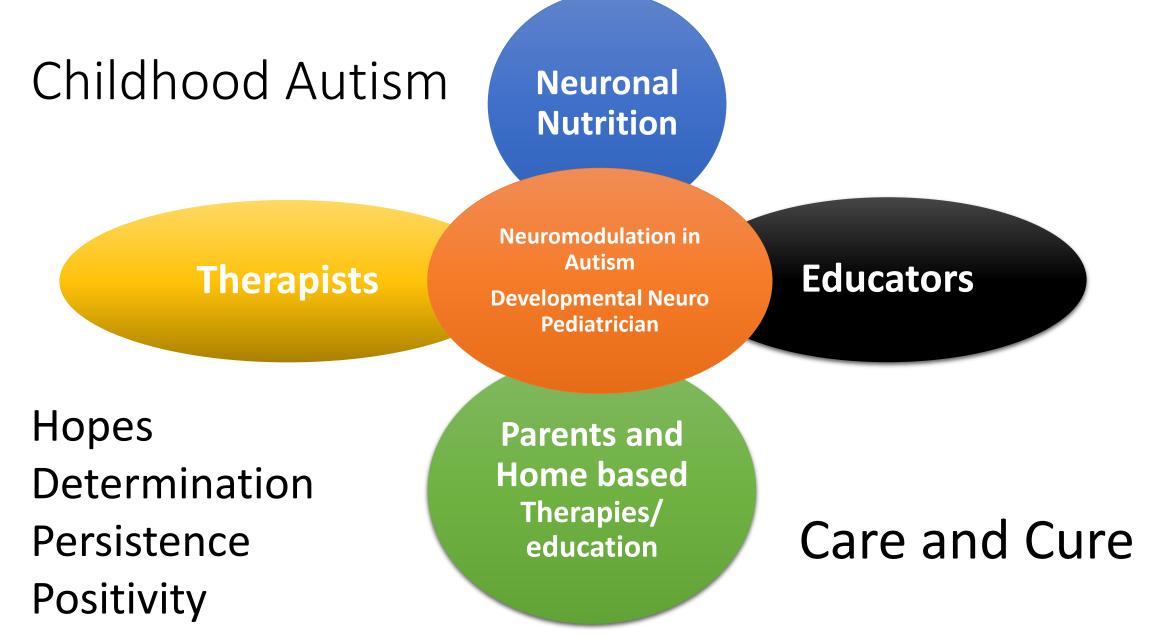
- D1 Doodh, Cheese, Paneer
- D2 Dry Fruits of any sort any form
- D3 Small seeded fruits
- D4 Hard Pulses and Daals

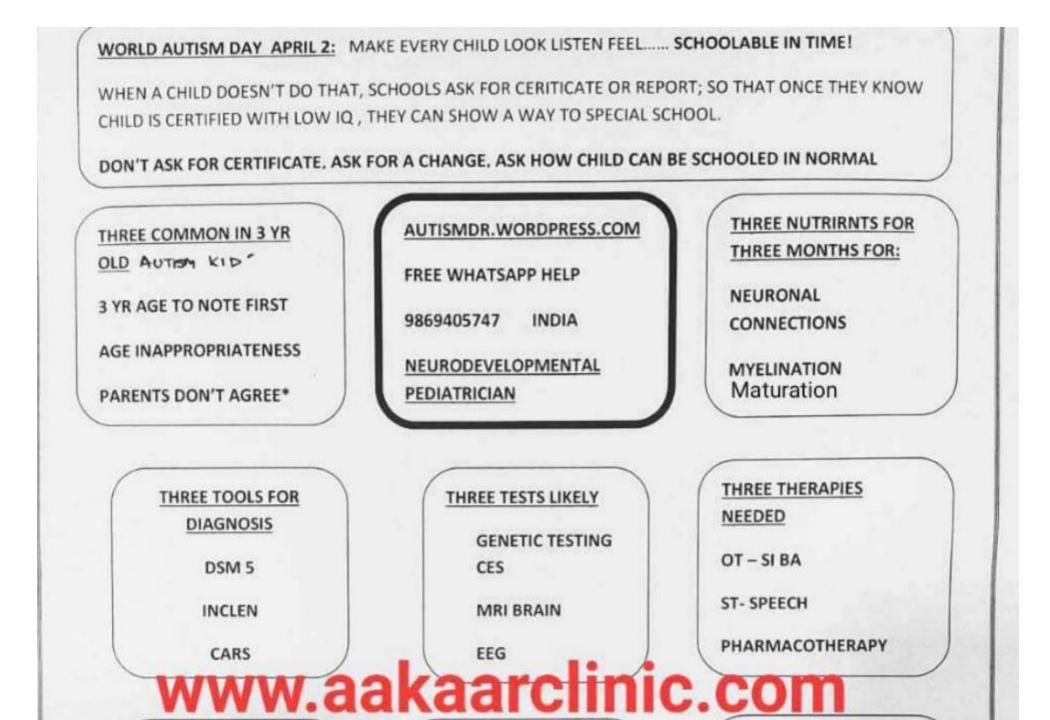
Stages of habilitation in autism

- Independence of eating, Activities of Daily living
- Functionality
- Concrete operations
- Learning
- Creativity
- Socialisation . Behaviour and confidence
- Getting close to age appropriateness











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For more information

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