BREAKING BARRIERS: NURTURING NEURODIVERSE ADOLESCENTS

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Attentior Deficit/ Spectrum Hyperactivity Disorder Disorder Developmental Developmental Language Coordination Disorder Disorder Tic Disorders Dyslexia Intellectual Dyscalculia Disability

Neurodiversity

Judy Singer, an Australian sociologist, coined the term neurodiversity to promote equality and inclusion. It means that there are many differences in the way people's brains work.

There's no "correct" or "incorrect" way. A main goal of the neurodiversity movement is to shine a light on the benefits of diversity.





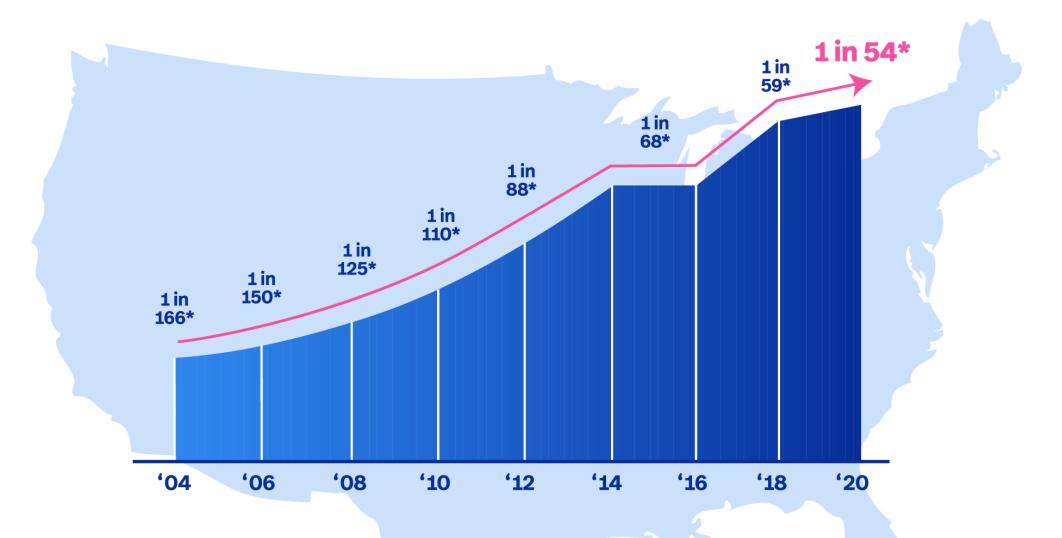
Key Developmental Milestones

- Typical Developmental Milestones for Adolescents (10-19 years)
 - Adolescents undergo significant changes in
 - Physical,
 - Cognitive,
 - Sexual,
 - Emotional Developmental milestones
 - Abstract and logical thinking
 - Increased independence.
 - PREVELANCE OF MENTAL DISORDERS GLOBALLY IS 20%, ONLY 7% IS REPORTED IN INDIA.

Estimated Autism Prevalence 2020









^{*} Centers for Disease Control and Prevention (CDC) prevalence estimates are for 4 years prior to the report date (e.g. 2020 figures are from 2016)





Table 1. Prevalence rates (with 95% confidence intervals [CI]) for mental health problems in autism samples and the general population.

Mental Health Problem	Autism Sample	General Population
Attention-deficit hyperactivity disorder	28% (CI 25-32%)	7.2% (CI 6.7 to 7.8%)
Anxiety disorders	20% (CI 17-23%)	7.3% (CI 4.8–10.9%)
Disruptive, impulse-control and conduct disorders	12% (CI 10-15%)	7.0% (CI 4.0-10%)
Depressive disorders	11% (CI 9–13%)	4.7% (CI 4.4-5.0%)
Obsessive-compulsive and related disorders	9% (CI 7-10%)	0.7% (CI 0.4-1.1%)

Source: Zeidan et al. (2022) [7].







Persistent deficits in social communication and interaction, across multiple context.

- Social-emotional reciprocity.
- Non-Verbal communicative behaviour
- Developing, maintaining, and understanding relationships.

SPECTRUM

DISORDER

Symptoms



Restricted, repetitive patterns of behaviour, interest, or activities.

Stereotyped or repetitive motor movements, use of objects, or speech.

Adherence to routines, sameness or ritualized patterns of verbal or non verbal behaviours.

Abnormally highly restricted, fixated interests.

Hyper or hypo-reactivity to sensor input.





Characteristics of Adolescents with ASD

Social Communication

- Non-verbal
- Difficulty with abstract thought, inability to listen to others, or accept another's point of view, inflexible thinking, literal interpretation
- May be painfully shy or extremely outgoing (in your face)
- Problems managing appropriate social conduct/interactions
- Misinterpretation of cues from others







Restrictive Interests and Repetitive Behaviors

- Change in routines can produce stress/anxiety
- Specialized areas of interest
- Increase in compulsions
- Sensory sensitivities

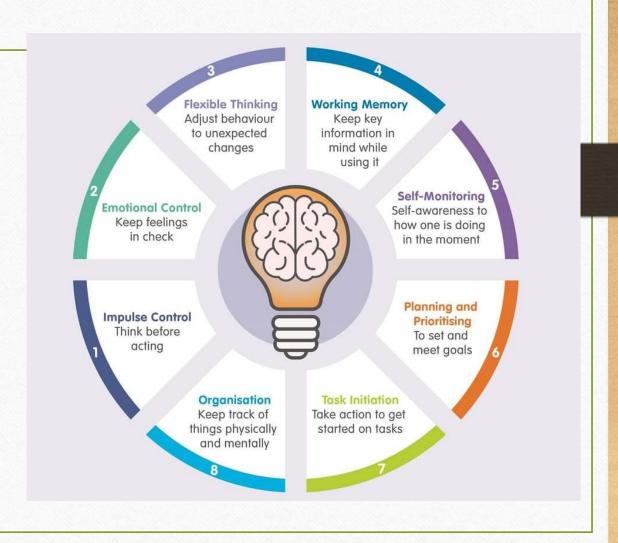






Problems with executive functioning

- Issues with organising tasks
- Planning time effectively
- Difficulties initiating tasks and transitioning between activities.
- Adapting to changes in routine or unexpected events







- Difficulty with anger management
- Feelings of anxiety/depression
- Aggressive/self abusive behaviors
- Tantrums
- Sleep problems





Challenges Faced by Neurodiverse Adolescents in Achieving milestones

Challenges Faced by Neurodiverse Adolescents in Achieving milestones		
Dependency	Secured living at home, without adequate opportunities for personal growth	
Family system	• Little or no say over basic aspects of their lives, limiting their sense of autonomy.	
Health and medical issues	 Increased risk of being victims of physical and psychological abuse, domest violence. 	
Educational opportunities	 Lack of trained special educator, appropriate teaching materials, unwillingness to include neurodiverse children in regular classroom, families and society not perceiving the need for education, general lack of availability, affordability 	
Lack of job training	Fewer or no skill, difficulty competing, impairment limiting job options	
Social	Poverty, Stigma and discrimination	

Vulnerability of young disabled

• Risk taking behaviour, motor vehicle accidents, experimenting with drugs, risk of violence





Medical comorbidities ASD

- Seizures 20 times more chances of seizures than the neurotypical adolescents (more common if associated with ID)
- Sleep disorders- 40-80%
 - Insomnia, delayed onset, night waking, early waking, decreased need for sleep
 - Effects of poor sleep: irritability, fatigue
- GI disturbances- 80% (higher chances of constipation)
- ADHD
- Anxiety disorders





CHALLENGES FACED BY ADOLESCENTS WITH ASD

Poor social skills

Emotional dysregulation

Impatient

Socially inappropriate behaviours

Poor self esteem
Bullying by peers
Depression
Rebellious
behaviour

Aggression

Awareness in parents, teachers and community

Empowering the adolescent for self advocacy

Empathatic support from

peers





CHALLENGES FACED BY ADOLESCENTS WITH ADHD/ LD



Poor academic performance > low self esteem

- Leading to: depression, risk taking behaviours(addiction), subjected to bullying by peers
- Solution: awareness in teachers and community for effective intervention. Awareness in peers for empathy and support



Labelled Difficult, Lazy, Inattentive

- Leading to: Rebellious, defiant
- Diagnosis to empower parent and child know about the condition and active participation in intervention and management of self.



Lack of empathy and peer rejection

- Leading to: victims of bullying, influenced into gang activity/ conduct behaviours
- Support at school by having policies against bullying. Help child speak up. Positive peer influence.





Puberty







I used to be a small boy Now I am a young man



My body is changing



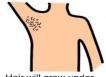
This is a good thing!



I'm getting taller



Soon I will have more hair on on my legs



Hair will grow under



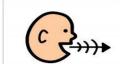
I might grow chest hair



And I will have



When I am about 15, hair will grow on my face





My penis is also growing



Soon, I will put on



Dad and Mom will show

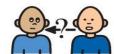




Sometimes, I might feel embarrassed about these changes



Sometimes, I might feel proud!



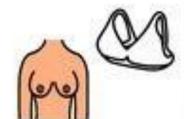
It's okay to ask questions about

I'm Getting Older: For Boys

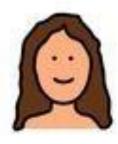


My parents love me and they understand

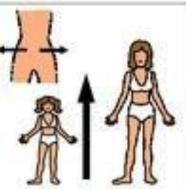
I will need to start wearing a bra to protect my breasts. I wear it over my breasts, and under my clathes.



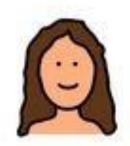
This is okay.



I am becoming a woman.



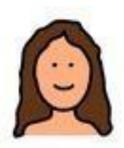
My hips are getting bigger and I will grow taller.



This is okay. I am becoming a woman.



Hair is growing on my armpits and vagina.



This is okay. I am becoming a woman.





Menstruation

- Autistic children might need time to understand and adjust to the physical changes of puberty \rightarrow good idea to start talking about periods early.
- Reassure that menstruation is not dirty, but a part of growing up.
- Care for herself with sanitary pads, towel, etc.
- Ready stock to be kept in a place known and easily accessible
- Look after personal cleanliness, including disposal of pads.
- Pictures to illustrate these feelings might be useful.





Social stories/Flash cards

- As my body changes I will get my period.
- When I get my period, blood comes out through my vagina.
- I will need to use special underpants, a pad or a tampon so my clothes don't get stained.
- Periods usually come every 28 days. Sometimes it might be sooner or later. This is OK.
- A few days before I get my period, I might feel more upset about things. I might feel angry, I might feel sad, I might feel frustrated, or I might feel other emotions. Feeling this way is normal and usually stops when my period starts.
- My breasts, stomach and the lower part of my back might feel sore at this time. This is normal.
- Putting a hot water bottle on my stomach and having some pain relief medicine can help me feel less sore.
- I might have my period for 4-7 days. It might be shorter. This is OK.
- If my period goes for longer than 7 days, I will talk to an adult who cares about me.

Period Flash Cards

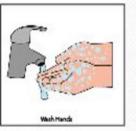
















Night Emissions

- Natural biological phenomenon in boys
- Teach him how to clean himself
- Self stimulation- without scolding divert attention.
- Teach that it should not be indulged in public.
- Keep them occupied.
- Give opportunities for vigorous sports, recreational activities





Show of Affection

- Parents and teachers need to teach about expressing emotions
- Decide which form of greeting to use while addressing others.
- Discourage expression of affection through physical contact like kissing people outside the close family from an early age.
- Teach them to distinguish between close family members and outsiders.

Does Not Recognize Boundaries Gives
Everyone
Hugs, Including
Strangers

Overshares
Personal
Information

Talks Excessively to Others; Sometimes About Preferred Topics, Often Struggles to Recognize and Monitor Listener's Interest

Will Talk to Anyone and Everyone About Anything

Exaggerated
Body
Language or
Tone of Voice

Invades
Others'
Personal
Space





No/Mild ID

Capable of understanding functions of body

Feeling of inferiority or superiority is strong

To teach appropriate behaviour: give experiences like picinics, trips, family gathering, religious functions.

Moderate to severe ID

Habit training is utmost importance.

Teach good habits

Instill sense of privacy

Shut bathroom doors

Provide private place for dressing

Teach appropriate method of greeting and display of affection





Promoting better mental health

- Encouraging social connections and reducing social isolations.
- Increasing social motivation (enjoyable interaction)
- Increasing autonomy and self determination
- Build on assets by recognising strengths and talents



Supporting Adolescents with ASD

- Early Intervention Programs
- Individualized Education Plans (IEPs)
- Social Skills Training
- Sensory Integration Therapy

Play Skills

- Taking turns in games
- · Sharing toys
- · Gestures
- · Social interactions
- Waiting for others





- talk about

 What body
- Initiating conversations
- · Greetings



Emotional Skills

- Managing emotions
- Understanding how others feel
- Understanding facial expressions
- · Empathy





Problem Solving Skills

- Dealing with conflict
- Making decisions in social situations.
- · Expressing opinions





Strategies for Parents and Caregivers

- Establishing Routine and Structure
- Clear Communication and Expectations
- Encouraging Independence
- Providing Emotional Support





Strategies for

Educators

- Creating Inclusive Classroom Environments
- Utilizing Visual Supports
- Incorporating Special Interests
- Implementing Positive Behavior
 Support

Peer acceptance

- Peer Education Programs
- Encouraging Empathy and Acceptance
- Involving Peers in Social Activities





Caring for caregivers

- Family Counseling and Support Groups
- Education on Neurodiversity
- Collaborative Goal Setting
- Respite and Relief Services





Take home

- Independence in daily living activities to be focused on (personal hygiene, cleaning, feeding) \rightarrow teaching finances \rightarrow encouraging independence
- Identifying the strengths of individual and creating inclusion
- Encourage self advocacy
- Family counselling is utmost important and mental health of the caregiver is also to be taken care of.







Don't think that there's a different, better child 'hiding' behind the autism. This is your child. Love the child in front of you. Encourage his strengths, celebrate his quirks, and improve his weaknesses, the way you would with any child.

Claire LaZebnik

